


STATEWIDE CONTRACT (MY) AWARD <b>RENEWAL</b>			NUMBER : 4034393
STATE OF TENNESSEE			BUYER : JAMES BUTTREY
DEPARTMENT OF GENERAL SERVICES PURCHASING DIVISION			BUYER PHONE : (615)532-9857
			SWC NUMBER : 420
			DATE ISSUED : 07/31/09
			VENDOR NUMBER : 361115800-20
			VENDOR PHONE : (615)771-2741
			FEIN/SSN : 361115800
			REQ AGENCY : 32110
			DEPARTMENT OF GENERAL SERVICE
			AGENCY REQ NO. :
			TOPS REQ NO. : 1059977
			FISCAL YEAR : 07
			EFFECTIVE DATE : 09/01/06
			EXPIRATION DATE : 08/31/10
			DELIVERY CONTACT :
			DELIVERY PHONE : - - -
<p>MOTOROLA INC (COMMUNICATIONS GRP) 341 COOL SPRINGS BLVD #300 FRANKLIN TN 37067-</p>			

RADIOS, TWO-WAY, SWC 420  
OPTIONS & ACCESSORIES

1. ORDERING PERIOD: CONTRACT BEGIN ORDERING PERIOD DATE IS: 09/01/06  
CONTRACT END ORDERING PERIOD DATE IS: 08/31/10
2. F.O.B. POINT: DESTINATION
3. DELIVERY: DELIVERY WILL BE MADE WITHIN: 045 DAYS ARO  
UNLESS SPECIFIED DIFFERENTLY ON EACH LINE OR UNLESS  
AN ALTERNATE DELIVERY SCHEDULE IS INDICATED. AN  
ALTERNATE DELIVERY SCHEDULE IS ENCLOSED HEREIN: NO
4. PROMPT PAYMENT TERMS: PROMPT PAYMENT TERMS ARE: N/A
5. BID REFERENCE NO.: YOUR BID REFERENCE NUMBER IS: 06-29414
6. AWARDED LINES: YOU WERE AWARDED 00063 LINES FROM THE SOLICITATION NUMBER 2055328.  
THESE LINES ARE INCLUDED AS A PART OF THIS CONTRACT.
7. THE TOTAL PURCHASES OF ANY INDIVIDUAL ITEM ON THE CONTRACT IS NOT KNOWN. THE PURCHASING DIVISION HAS  
ATTEMPTED TO GIVE AN ACCURATE ESTIMATE OF PROBABLE PURCHASES OF EACH ITEM FROM THE CURRENT CONTRACT PERIOD  
AND PROJECTED ESTIMATES FOR THE NEW CONTRACT PERIOD. THE PURCHASING DIVISION DOES NOT GUARANTEE THAT THE  
STATE WILL BUY ANY OR ALL ESTIMATED AMOUNTS OF ANY SPECIFIED ITEM OR ANY TOTAL AMOUNT.

ALL TERMS AND CONDITIONS AS A PART OF SOLICITATION 2055328 INCLUDING ANY AMENDMENTS  
THERE TO AND ALSO INCLUDING THE BIDDER'S PROPOSAL AS ACCEPTED BY THE STATE ARE  
INCLUDED HEREIN BY REFERENCE AND MADE PART HEREOF EXCEPT AS SPECIFIED HEREIN.

APPROVED:

DIRECTOR OF PURCHASING

BY:

VENDOR COPY

6353

DATE

TERMS AND CONDITIONS	STATEWIDE CONTRACT (MY)	
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PURPOSE OF INVITATION TO BID / SOURCE OF SUPPLY CONTRACT

THE PURPOSE OF THIS INVITATION TO BID IS TO ESTABLISH A TERM CONTRACT(S) TO SUPPLY: RADIO'S TWO-WAY WITH ACCESSORIES AND OPTIONS.

A TERM CONTRACT MEANS A CONTRACT IN WHICH A SOURCE OR SOURCES OF SUPPLY ARE ESTABLISHED FOR A SPECIFIED PERIOD OF TIME AT AN AGREED UPON UNIT PRICE(S).

FREIGHT F.O.B. STATE AND LOCAL GOVERNMENT AGENCIES

ALL QUOTATIONS SHALL BE F.O.B. DESTINATION. THE TERM F.O.B. DESTINATION SHALL MEAN DELIVERED AND UNLOADED ONTO THE RECEIVING DOCK OF ANY STATE AGENCY AND, WHEN APPLICABLE, ANY LOCAL GOVERNMENT AGENCY OR AUTHORIZED CORPORATION WITHIN THE STATE OF TENNESSEE, WITH ALL CHARGES FOR TRANSPORTATION AND UNLOADING PREPAID BY THE VENDOR/CONTRACTOR.

TERM OF CONTRACT

THE ANTICIPATED EFFECTIVE DATE AND EXPIRATION DATE OF THE CONTRACT ARE SHOWN ON THE FRONT OF THIS SOLICITATION. IF AWARD HAS NOT BEEN MADE BY THE ANTICIPATED EFFECTIVE DATE, THEN THE CONTRACT SHALL BECOME EFFECTIVE UPON THE DATE THE BID IS ACCEPTED AND CONTRACT AWARDED BY THE STATE, AS INDICATED BY THE PURCHASING AGENT'S SIGNATURE ON THE CONTRACT NOTICE OF AWARD (NOTE: THE CHANGE OF EFFECTIVE DATE MAY NOT RESULT IN A CHANGE OF THE ANTICIPATED EXPIRATION DATE.)

RENEWAL OPTIONS: THIS CONTRACT MAY BE RENEWED UPON SATISFACTORY COMPLETION OF THE INITIAL CONTRACT TERM. THE STATE RESERVES THE RIGHT TO EXECUTE UP TO (3) OPTIONS TO RENEW THIS CONTRACT ANNUALLY UNDER THE SAME TERMS AND CONDITIONS FOR A PERIOD NOT TO EXCEED 12 MONTHS EACH BY THE STATE. IT IS MUTUALLY UNDERSTOOD AND AGREED THAT THE STATE'S COMMITMENT IS LIMITED TO A BASE TERM CONTRACT, NOT TO EXCEED TWELVE (12) MONTHS, WHICH IS SUBJECT TO RENEWAL ANNUALLY AT THE STATE'S SOLE OPTION.

IT IS UNDERSTOOD AND AGREED THAT THE STATE RESERVES THE RIGHT TO EXTEND THE TERM CONTRACT PERIOD RESULTING FROM THIS SOLICITATION AN ADDITIONAL PERIOD OF TIME, NOT TO EXCEED 180 DAYS BEYOND THE NORMAL EXPIRATION DATE OF SUCH CONTRACT, UPON MUTUAL WRITTEN AGREEMENT BY BOTH PARTIES, UNDER THE SAME TERMS AND CONDITIONS. PROVIDED, HOWEVER, IN NO EVENT SHALL THE MAXIMUM TERM OF A CONTRACT EXCEED A TOTAL OF SIXTY (60) MONTHS.

DELIVERY TIME (DAYS)

ALL ITEMS MUST BE DELIVERED WITHIN APPROXIMATELY (45) DAYS AFTER RECEIPT OF A PURCHASE ORDER.

FIXED BID PERCENTAGE FOR CONTRACT PERIOD.

BID PERCENTAGES MUST BE FIXED FOR THE TERM OF THE CONTRACT.

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BID PERCENTAGES MUST BE FIXED FOR THE TERM OF THE CONTRACT.

REQUESTS FOR PRICE CHANGES BASED ON CATALOG PRICE LISTS

WRITTEN REQUESTS FOR PRICE CHANGES ON TERM CONTRACTS BASED ON CATALOG OR PRICE LISTS MAY BE SUBMITTED IN WRITING 365 DAYS AFTER AWARD AND IN INCREMENTS OF 12 MONTHS THERE AFTER. THE REQUEST MUST INCLUDE COPIES OF OLD AND NEW PRICE LISTS THAT REFLECT A CHANGE IN THE CONTRACTOR'S COST AND APPLY TO ALL CUSTOMERS. ALL REQUESTS FOR PRICE INCREASES MUST BE IN WRITING, MUST NOT CONSTITUTE INCREASES IN PROFIT, AND MUST CONTAIN DATA ESTABLISHING OR SUPPORTING THE GENERAL OR INDUSTRY WIDE NATURE OF THE CHANGE. AT THE OPTION OF THE STATE, (1) THE REQUEST MAY BE GRANTED, (2) THE CONTRACT MAY BE CANCELLED AND AWARDED TO THE NEXT LOWEST RESPONSIVE AND RESPONSIBLE BIDDER WHOSE BID MEETS THE REQUIREMENTS AND CRITERIA SET FORTH IN THE INVITATION TO BID, (3) THE COMMODITY/SERVICE MAY BE READVERTISED FOR AWARD AND SUBSEQUENT CANCELLATION OR (4) CONTINUE THE CONTRACT WITHOUT CHANGE.

THE PURCHASING DIVISION WILL ACCEPT OR REJECT ALL SUCH WRITTEN REQUESTS WITHIN THIRTY (30) WORKING DAYS OF THE DATE OF RECEIPT. IF APPROVED, THE PURCHASING DIVISION WILL NOTIFY THE CONTRACTOR OF THE DATE THE INCREASE WILL BE EFFECTIVE. CONTRACTORS MUST HONOR ALL PURCHASE ORDERS DATED UP TO THIRTY (30) DAYS SUBSEQUENT TO THE PRICE CHANGE REQUEST AT THE ORIGINAL PRICE. CONTRACTORS SHALL REPORT PRICE DECREASES IMMEDIATELY UPON RECEIPT OF THE DECREASE, AND THE STATE SHALL RECEIVE PROPORTIONATE PRICE REDUCTIONS.

APPROVAL OF PRICE INCREASES

PRICE INCREASES, WHEN GRANTED, WILL BE EFFECTIVE ON THE FIRST OF THE FOLLOWING MONTH AND WILL BE PUBLISHED IN THE PURCHASING CATALOG ISSUED DURING THE LAST WEEK OF EACH MONTH. NO INCREASE SHALL BE EFFECTIVE UNTIL APPROVED AND PUBLISHED. APPROVAL OF ANY PRICE INCREASE RENEWS THE FIRM PRICE PERIOD.

PRICE INCREASE REJECTION

WHEN THE STATE REJECTS A REQUEST FOR A PRICE INCREASE, THE VENDOR/CONTRACTOR WILL BE NOTIFIED OF THE STATES INTENTION PRIOR TO THE FIRST OF THE FOLLOWING MONTH. AT THE OPTION OF THE STATE, (1) THE CONTRACT MAY BE CANCELLED AND AWARDED TO THE NEXT LOWEST RESPONSIVE AND RESPONSIBLE BIDDER WHOSE BID MEETS THE REQUIREMENTS AND CRITERIA SET FORTH IN THE INVITATION TO BID, (2) THE COMMODITY/SERVICE MAY BE READVERTISED FOR AWARD AND SUBSEQUENT CANCELLATION, OR (3) CONTINUE THE CONTRACT WITHOUT CHANGE.

SUBSTITUTE EQUIPMENT OFFERED BY THE CONTRACTOR

THE POSTURE OF THE STATE IS TO STAY CURRENT IN ITS COMMUNICATION TECHNOLOGY, THEREFORE, THE PURCHASING DIVISION MAY ALLOW THE CONTRACTOR TO OFFER TO THE STATE SUBSTITUTE ITEM(S) DURING THE INITIAL CONTRACT PERIOD AND RENEWALS THEREOF PROVIDED THE FOLLOWING CONDITIONS ARE MET:

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ARE MET:

- A. THE FUNCTIONAL, TECHNICAL AND PERFORMANCE CHARACTERISTICS OF THE SUBSTITUTE ITEM(S) IS EQUAL TO OR EXCEED THE ITEM(S) IT IS TO REPLACE.
- B. THE PRICE OF THE SUBSTITUTE ITEM(S) IS EQUAL TO OR LESS THAN THE PRICE OF REPLACEMENT. THE PERFORMANCE SPECIFICATIONS SHALL BE THE SAME TO BETTER THAN THE PRODUCT REPLACEMENT.
- C. THE CONTRACTOR'S OFFER CONTAINS SUFFICIENT DETAILED INFORMATION TO SUBSTANTIATE THAT THE CONDITIONS SPECIFIED ABOVE ARE COMPLIANT.
- D. THE SUBSTITUTE ITEM HAS BEEN FORMALLY ANNOUNCED BY THE MANUFACTURER AS BEING COMMERCIALY AVAILABLE AS OF THE DATE THE SUBSTITUTION REQUEST IS MADE.

AT ITS SOLE DISCRETION, THE PURCHASING DIVISION MAY ACCEPT OR REJECT ANY SUBSTITUTE ITEM(S) OFFERED BY THE CONTRACTOR. FURTHER IN THE EVENT OF MAJOR TECHNOLOGY ADVANCES, THE PURCHASING DIVISION MAY CANCEL ANY AND ALL OF THE CONTRACT ITEMS AND BID THE NEW TECHNOLOGY. RETURN GOODS POLICY FOR WARRANTY MATTERS

ALL COSTS ASSOCIATED WITH THE RETURN OF GOODS FOR REPAIR AND/OR REPLACEMENT UNDER WARRANTY SHALL BE DONE AT THE EXPENSE OF THE VENDOR.

#### WARRANTY PERIOD

A BIDDER WARRANTS THE PRODUCT TO BE FREE OF DEFECTS FOR ONE YEAR FROM AGENCY RECEIPT OF PRODUCT.

#### REPORTS - SEMI-ANNUAL

THE SUCCESSFUL BIDDER SHALL BE REQUIRED TO SUBMIT SEMI-ANNUAL REPORTS IN EXCEL FORMAT TO THE PURCHASING AGENT LISTED ON THE AWARDED CONTRACT. THE SEMI-ANNUAL REPORTS WILL PROVIDE STATISTICAL DATA ON ALL PURCHASES MADE FROM THE AWARDED CONTRACT BY STATE AGENCIES. IF THE BIDDER EXTENDED THE BID OFFER TO LOCAL GOVERNMENTS AND AUTHORIZED NON-PROFIT AGENCIES, THE SEMI-ANNUAL REPORTS WILL ALSO PROVIDE STATISTICAL DATA ON ALL PURCHASES MADE FROM THE AWARDED CONTRACT BY LOCAL GOVERNMENT UNITS AND AUTHORIZED NON-PROFIT AGENCIES PURSUANT TO THE APPLICABLE TERM LOCATED IN THE INVITATION TO BID DOCUMENT TITLED "PURCHASES BY LOCAL GOVERNMENT AND AUTHORIZED NON-PROFIT AGENCIES."

THE REPORT IS TO BE DETAILED, BROKEN DOWN BY LINE ITEM AND INCLUDE THE FOLLOWING DATA:

- 1) CONTRACT NUMBER
- 2) AGENCY OR LOCAL GOVERNMENT UNIT OR NON-PROFIT AGENCY
- 3) CONTRACT LINE ITEM NUMBER
- 4) COMMODITY DESCRIPTION
- 5) LINE ITEM QUANTITY PURCHASED SEMI-ANNUALLY FOR EACH INDIVIDUAL AGENCY, GOVERNMENTAL UNIT OR NON-PROFIT AGENCY.

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AGENCY, GOVERNMENTAL UNIT OR NON-PROFIT AGENCY.

- 6) LINE ITEM DOLLAR AMOUNT (VOLUME) PURCHASED SEMI-ANNUALLY FOR EACH INDIVIDUAL AGENCY, GOVERNMENTAL UNIT OR NON-PROFIT AGENCY.
- 7) LINE ITEM QUANTITY PURCHASED TO DATE FOR EACH INDIVIDUAL AGENCY, GOVERNMENTAL UNIT OR NON-PROFIT AGENCY.
- 8) LINE ITEM DOLLAR AMOUNT (VOLUME) PURCHASED TO DATE FOR EACH INDIVIDUAL AGENCY, GOVERNMENTAL UNIT OR NON-PROFIT AGENCY.
- 9) SUB TOTALS FOR EACH CATEGORY ABOVE.
- 10) GRAND TOTALS FOR EACH CATEGORY ABOVE.

#### INSPECTION

ALL MATERIALS, EQUIPMENT, AND SUPPLIES ARE SUBJECT TO INSPECTION AND TESTING. ITEMS THAT DO NOT MEET SPECIFICATIONS WILL BE REJECTED. FAILURE TO REJECT UPON RECEIPT DOES NOT RELIEVE THE CONTRACTOR OF LIABILITY. WHEN SUBSEQUENT TESTS AFTER RECEIPT ARE CONDUCTED AND WHEN SUCH TESTS REVEAL DAMAGE OR FAILURE TO MEET SPECIFICATIONS, THE STATE MAY SEEK DAMAGES REGARDLESS OF WHETHER A PART OR ALL OF THE MERCHANDISE HAS BEEN CONSUMED.

#### PURCHASE ORDER RELEASE (SWC)

ORDERS FOR SERVICES OR SUPPLIES THAT ARE INCLUDED ON STATEWIDE CONTRACTS SHALL BE PREPARED BY AGENCIES ON DEPARTMENTAL PURCHASE ORDERS AND FORWARDED DIRECTLY TO THE VENDOR/CONTRACTOR. THESE PURCHASE ORDERS, WHEN RECEIVED BY THE VENDOR/CONTRACTOR, SERVE AS AUTHORIZATION FOR SHIPMENT. ITEMS FROM DIFFERENT CONTRACTS MAY BE COMBINED ON A SINGLE PURCHASE ORDER TO THE SAME VENDOR/CONTRACTOR TO MEET MINIMUM ORDER REQUIREMENTS. LOCAL GOVERNMENT AGENCIES OR AUTHORIZED CORPORATIONS, WHERE APPLICABLE, WILL ISSUE THEIR PURCHASE ORDER RELEASES DIRECTLY TO THE VENDOR/CONTRACTOR(S).

#### BILLING INSTRUCTIONS

THE CONTRACTOR SHALL INVOICE THE STATE ONLY AFTER COMPLETION OF THE WORK DESCRIBED IN THE PURCHASE ORDER/CONTRACT, AND AS REQUIRED BELOW PRIOR TO ANY PAYMENT.

THE CONTRACTOR SHALL SUBMIT AN INVOICE, WITH ALL NECESSARY SUPPORTING DOCUMENTATION, TO: STATE AGENCY BILLING ADDRESS

SUCH INVOICE SHALL CLEARLY AND ACCURATELY DETAIL THE FOLLOWING REQUIRED INFORMATION.

INVOICE/REFERENCE NUMBER; (ASSIGNED BY THE CONTRACTOR)  
 INVOICE DATE;  
 CONTRACT AND/OR PURCHASE ORDER NUMBER; (ASSIGNED BY THE STATE)  
 ACCOUNT NAME; PROCURING STATE AGENCY AND DIVISION NAME  
 ACCOUNT/CUSTOMER NUMBER; (UNIQUELY ASSIGNED BY THE CONTRACTOR TO THE ABOVE-REFERENCED ACCOUNT NAME;  
 CONTRACTOR NAME;  
 CONTRACTOR FEDERAL EMPLOYER IDENTIFICATION NUMBER OR SOCIAL SECURITY NUMBER; (AS REFERENCED IN CONTRACT)  
 CONTRACTOR CONTACT (NAME, PHONE, AND/OR FAX FOR THE INDIVIDUAL TO CONTACT WITH BILLING QUESTIONS);

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CONTACT WITH BILLING QUESTIONS);  
 CONTRACTOR REMITTANCE ADDRESS;  
 DESCRIPTION OF DELIVERED ITEM OR SERVICE; AND  
 TOTAL AMOUNT DUE FOR DELIVERED ITEM OR SERVICE.

THE CONTRACTOR UNDERSTANDS AND AGREES THAT THE INVOICE SHALL;

INCLUDE ONLY CHARGES FOR SERVICE DESCRIBED IN CONTRACT OR PURCHASE ORDER AND IN ACCORDANCE WITH PAYMENT TERMS AND CONDITIONS SET FORTH IN CONTRACT OR PURCHASE ORDER;

NOT INCLUDE ANY FUTURE WORK BUT WILL ONLY BE SUBMITTED FOR COMPLETED SERVICE; AND

NOT INCLUDE SALES TAX OR SHIPPING CHARGES (UNLESS OTHERWISE STIPULATED IN THE CONTRACT OR PURCHASE ORDER).

THE CONTRACTOR AGREES THAT TIMEFRAME FOR PAYMENT (AND ANY DISCOUNTS) BEGINS WHEN THE STATE IS IN RECEIPT OF A CORRECT INVOICE MEETING THE MINIMUM REQUIREMENTS ABOVE.

#### PAYMENT

IT SHALL BE THE RESPONSIBILITY OF THE "BILL TO" AGENCY TO MAKE PAYMENT. ANY QUESTIONS CONCERNING PAYMENT SHOULD BE ADDRESSED TO THE "BILL TO" AGENCY LISTED IN THE TOP, RIGHT SIDE OF THE PURCHASE ORDER, NOT THE PURCHASING DIVISION.

#### CANCELLATION

TERMINATION FOR CONVENIENCE: THE STATE MAY TERMINATE THIS CONTRACT WITHOUT CAUSE. SAID TERMINATION SHALL NOT BE DEEMED A BREACH OF CONTRACT BY THE STATE. THE STATE SHALL GIVE THE VENDOR/CONTRACTOR AT LEAST NINETY (90) DAYS WRITTEN NOTICE BEFORE THE EFFECTIVE CANCELLATION DATE.

THE VENDOR/CONTRACTOR SHALL BE ENTITLED TO RECEIVE COMPENSATION FOR GOODS SHIPPED OR SERVICES SATISFACTORILY COMPLETED AS OF THE CANCELLATION DATE, BUT IN NO EVENT SHALL THE STATE BE LIABLE TO THE VENDOR/CONTRACTOR FOR COMPENSATION FOR ANY GOODS OR SERVICES WHICH HAVE NOT BEEN RENDERED.

UPON SUCH TERMINATION, THE VENDOR/CONTRACTOR SHALL HAVE NO RIGHT TO ANY ACTUAL GENERAL, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR ANY OTHER CLAIMS WHATSOEVER OF ANY DESCRIPTION OR AMOUNT.

TERMINATION FOR CAUSE: IF THE VENDOR/CONTRACTOR FAILS TO FULFILL ITS OBLIGATIONS UNDER THIS CONTRACT IN A TIMELY OR PROPER MANNER, OR IF THE VENDOR/CONTRACTOR VIOLATES ANY TERMS OF THIS CONTRACT, THE STATE SHALL HAVE THE RIGHT TO IMMEDIATELY TERMINATE THE CONTRACT UPON WRITTEN NOTICE OF INTENT TO CANCEL. THE STATE SHALL HAVE THE RIGHT TO WITHHOLD PAYMENT IN EXCESS OF FAIR COMPENSATION FOR COMPLETED SERVICES. NOTWITHSTANDING THE ABOVE, THE CONTRACTOR SHALL NOT BE RELIEVED OF LIABILITY TO THE STATE FOR DAMAGES SUSTAINED BY VIRTUE OF ANY BREACH OF THIS CONTRACT BY THE CONTRACTOR.

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AT THE END OF ANY FISCAL YEAR ANY CONTRACT MAY BE CANCELED BY THE STATE WITHOUT NOTICE, IN THE EVENT THAT FUNDS TO SUPPORT THE CONTRACT BECOME UNAVAILABLE.

THE VENDOR/CONTRACTOR WILL BE REQUIRED TO HONOR ALL PURCHASE ORDERS THAT WERE PREPARED AND DATED PRIOR TO THE DATE OF THE TERMINATION, IF RECEIVED BY THE VENDOR/CONTRACTOR WITHIN A PERIOD OF THIRTY (30) DAYS FOLLOWING THE DATE OF TERMINATION.

#### NEW EQUIPMENT

ONLY EQUIPMENT COMMERCIALY AVAILABLE TO THE GENERAL PUBLIC AS OF THE BID OPENING DATE MAY BE BID IN RESPONSE TO THIS INVITATION TO BID OR OFFERED AS A SUBSTITUTE UNDER A RESULTING CONTRACT. ONLY NEW EQUIPMENT-DEFINED AS EQUIPMENT THAT HAS NOT BEEN USED FOR ANY PURPOSE OTHER THAN PERFORMANCE TESTING PRIOR TO DELIVERY OR INSTALLATION OR FOR CERTIFICATION, EITHER DURING INITIAL BID EVALUATION OR SUBSEQUENTLY IS ACCEPTABLE FOR DELIVERY TO FULFILL PURCHASE ORDERS ISSUED UNDER RESULTING CONTRACT. NEW EQUIPMENT MAY INCLUDE INTERNAL REFURBISHED OR RECONDITIONED COMPONENTS NORMALLY USED IN THE MANUFACTURING PROCESS AND DEEMED AND WARRANTED AND SOLD AS NEW EQUIPMENT BY THE MANUFACTURER.

CATEGORY 100 - HF 2 - 30 MHZ SSB MOBILE RADIO

THIS CATEGORY IS FOR HF LOW BAND MOBILE SSB, ANALOG MOBILE

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 2 - 30 MHZ.  
CHANNELS: 20  
CHANNEL SPACING: 20 KHZ.  
MODE OF OPERATION: SIMPLEX & HALF DUPLEX  
EMISSION: ANALOG  
R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
13.8 VOLT D.C. OPERATION  
R.F. SYNTHESIZED  
FRONT PANEL FREQUENCY PROGRAMMABLE  
SQUELCH  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE  
METERING FACILITY (INTERNAL OR WITH P.C. OR EXTERNAL TEST SET)  
BUILT-IN RECEIVER SPEAKER  
TEST MICROPHONE  
MIL-STD-810 C,D,E  
CHANNEL SCAN

#### TRANSMITTER

R.F. OUTPUT POWER: 125 WATT PEP.  
FREQ. SPREAD, FULL SPECS: 28 MHZ  
FREQ. STABILITY: 1 PPM

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FREQ. STABILITY: 1 PPM  
 SPURIOUS EMISSION: -64 DB PEP.  
 HARMONICS: -64 DB PEP.  
 CARRIER SUPPRESSION: -50 DB PEP  
 UNDESIREDB SIDEBAND SUPPRESSION: -55 DB PEP.  
 INTERMODULATION: -31 DB PEP.  
 AUDIO DISTORTION: 3% @ 1 KHZ.  
 HUM & RIPPLE: -50 DB  
 INBAND NOISE: -60 DB (30 HZ BW)  
 EMISSIONS: J3E, R3E, H3E, J2A,J2B

RECEIVER:

R.F. SENSITIVITY (10 DB. SINAD SSB): 0.50 UV.  
 SELECTIVITY @ 30.0 KHZ.: -60 DB @ -1 KHZ.  
 IMAGE REJECTION: -80 DB.  
 IF REJECTION: -85 DB.  
 UNDESIREDB SIDEBAND REJECTION: -55 DB@ -1 KHZ.  
 CROSS MODULATION REJECTION: -100 DB@ 100KHZ.  
 DESENSITIZATION: -100 DB @ 100KHZ.  
 INTERMODULATION: -80 DB.  
 SPURIOUS REJECTION: -80 DB.  
 RECIPROCAL MIXING: -100 DB@ 100KHZ  
 CLARIFIER RANGE: +/- 200 HZ IN 10 HZ STEPS  
 AUDIO DISTORTION: 3% MAX. @ 1 KHZ.  
 FREQ. SPREAD, FULL SPECS.: 8 MHZ.  
 AUDIO POWER: 5 WATTS

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

AUTOMATIC LINK ESTABLISHMENT (ALE) FEDERAL STANDARD 1045 & MIL STD188/  
 141/A  
 AUTOMATIC ANTENNA TUNER  
 HIGH STABILITY OSCILLATOR  
 FAX / DATA MODEM  
 AC OPERATION  
 DIGITAL NOISE BLANKER  
 EXTERNAL SPEAKER

II. AVAILABLE VENDOR OPTIONS:

RG-8/U COAXIAL CABLE  
 PL-259 CONNECTOR FOR RG-8/U CABLE  
 N-MALE CONNECTOR FOR RG-8/U CABLE

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CATEGORY 101- VHF LOW-BAND 60 WATT 128 CHANNEL MOBILE RADIO



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THIS CATEGORY IS FOR VHF LOW-BAND, 128 CHANNEL, FRONT OR REAR-MOUNT, ANALOG MOBILE RADIOS

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 42 - 50 MHZ.  
CHANNELS: 128  
CHANNEL SPACING: 20 KHZ.  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG  
R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
ALPHA-NUMERIC, ILLUMINATED, REMOTE MOUNT CONTROL HEAD, 10 CHARACTERS MINIMUM  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE WITH UNIT CLONING VIA P.C.  
P.C. ASSIGNABLE BUTTON FUNCTIONS  
CTCSS AND DCSS CAPABILITY, ALL EIA TONES AND DIGITAL CODES

OPERATOR PROGRAMMABLE PRIORITY CTCSS/DCSS SCAN  
SQUELCH TAIL ELIMINATION  
REPEATER TALK AROUND (DIRECT) BUTTON  
DTMF SELECTIVE CALL DECODING WITH HEADLIGHT AND HORN ALERTING  
BUSY CHANNEL TRANSMIT INHIBIT WITH BUSY CHANNEL INDICATOR  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE  
STANDARD MOBILE MICROPHONE  
STANDARD EXTERNAL MOBILE SPEAKER  
AUDIO SOURCE FOR WEATHER PROOF P.A. SPEAKER  
COMPLETE MOUNTING HARDWARE, CONTROL CABLING, AND WIRING HARNESSSES

TRANSMITTER:

RECEIVER:

R.F. OUTPUT POWER: 60W.	R.F. SENSITIVITY (12 DB.SINAD): 0.35 UV.
FREQ. SPREAD, FULL SPECS: 8 MHZ	INTERMODULATION: -80DB
FREQ. STABILITY: +/-0.0005%	ADJACENT CHANNEL SELECTIVITY: -80 DB
ADJACENT CH POWER: -70 DB. -	SPURIOUS & IMAGE REJECTION: -80 DB
FM HUM AND NOISE: -40 DB.	AUDIO DISTORTION: 3% @ 1 KHZ.
EMISSIONS: 16K0F3E	AUDIO POWER / DISTORTION: 3 WATTS / 3%
AUDIO DISTORTION: 3% OR LESS	FREQ. SPREAD, FULL SPECS.: 8 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I . AVAILABLE MANUFACTURE OPTIONS:

AC POWER SUPPLY  
FACTORY PROGRAMING  
BASE MICROPHONE

II. AVAILABLE VENDOR OPTIONS:

VOICE STORAGE  
CROSS-BAND REPEATER  
WHIP AND LOADED MOBILE ANTENNAS WITH 3/4" HOLE MOUNTING AND SILVER

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WHIP AND LOADED MOBILE ANTENNAS WITH 3/4" HOLE MOUNTING AND SILVER PLATED CONNECTOR  
WEATHER PROOF P.A. SPEAKER  
CONTROL STATION OPTION

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CATEGORY 102- DUAL BAND: VHF LOW BAND/VHF HIGH BAND/UHF 160 CHANNEL 100-WATT MOBILE RADIO.

THIS CATEGORY IS FOR VHF LOW-BAND, HIGH-BAND AND UHF, 160-CHANNEL, REAR-MOUNT, ANALOG, MOBILE RADIOS COMPATIBLE WITH DEPT OF SAFETY AND DEPARTMENT OF TRANSPORTATION EXISTING KENWOOD TK690 AND TK790 SERIES RADIOS.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 42-50/150-174/450-470 MHZ.  
CHANNELS: 160  
CHANNEL SPACING: 12.5 AND 30 KHZ. (VHF), 12.5 AND 25.0 KHZ.(UHF)  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG  
R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
ALPHA-NUMERIC, ILLUMINATED, SINGLE OR DUAL CONTROL HEAD CONFIGURATION, 14 CHARACTER MINIMUM PER LINE  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE WITH UNIT CLONING VIA P.C.  
P.C. ASSIGNABLE BUTTON FUNCTIONS  
CTCSS AND DCSS CAPABILITY, ALL EIA TONE AND DIGITAL CODES

OPERATOR SELECTABLE CTCSS AND/OR DCSS CODES, NOT SLAVED TO CHANNEL SELECTION, 16 CODES MINIMUM  
DYNAMICALLY ASSIGNABLE SCAN GROUPS - MINIMUM OF 50 GROUPS

OPERATOR PROGRAMMABLE PRIORITY CTCSS/DCSS SCAN  
OPERATOR PROGRAMMABLE HOME CHANNEL  
SQUELCH TAIL ELIMINATION

REPEATER TALK AROUND (DIRECT) BUTTON

BUSY CHANNEL TRANSMIT INHIBIT WITH BUSY CHANNEL INDICATOR  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE  
STANDARD MOBILE MICROPHONE  
INTERNAL SPEAKER  
AUDIO SOURCE FOR WATHER PROOF P. A. SPEAKER  
COMPLETE MOUNTING HARDWARE AND WIRING HARNESSSES

TRANSMITTER:

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R.F. OUTPUT POWER: 100 / 45 / 35-WATT  
 FREQ. SPREAD, FULL SPECS: 24/20 MHZ  
 FREQ. STABILITY: +/- 2/2 PPM  
 SPURIOUS & HARMONICS: -80 DB.  
 FM HUM AND NOISE: -43 DB. NB. / -50 DB. WB.  
 AUDIO DISTORTION: 3% @ 1 KHZ.  
 EMISSIONS: 11K0F3E, 16K0F3E

#### RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.35 UV.  
 SELECTIVITY @ 12.5 KHZ.: -65 DB  
                   @ 25.0 KHZ.: -80 DB.  
                   @ 30.0 KHZ.: -80 DB.  
 INTERMODULATION: -70 DB. NB., -80 DB. WB.  
 SPURIOUS & IMAGE REJECTION: -90/ -85 DB.  
 AUDIO POWER @ DISTORTION: 7.5 W. @ 3%  
 FREQ. SPREAD, FULL SPECS.: 24/20 MHZ

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

#### I. AVAILABLE MANUFACTURER OPTIONS:

ILLUMINATED DTMF MICROPHONE,  
 INTERNAL SPEAKER,  
 A. C. POWER SUPPLY,  
 CONTROL STATION DESK TOP MICROPHONE,  
 FACTORY PROGRAMMING

#### II. AVAILABLE VENDOR OPTIONS:

CROSS-BAND VEHICULAR REPEATER,  
 1/4 WAVE AND GAIN MOBILE ANTENNAS WITH 3/4" HOLE MOUNTING AND SILVER  
 PLATED CONNECTORS,  
 WEATHER PROOF P. A. SPEAKER,  
 DTMF SELECTIVE CALL DECODING WITH HEADLIGHT AND HORN ALERTING

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 CATEGORY 103- VHF HIGH BAND/UHF 25W. 128 CHANNEL MOBILE RADIO

THIS CATEGORY IS FOR VHF/UHF, 25 WATT, 128 CHANNEL FRONT-MOUNT,  
 ANALOG, MOBILE RADIOS

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
 BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 150 - 174/450 - 470 MHZ.  
 CHANNELS: 128  
 CHANNEL SPACING: 30 KHZ. / 25 KHZ. / 12.5 KHZ.

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CHANNEL SPACING: 30 KHZ. / 25 KHZ. / 12.5 KHZ.  
 MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
 EMISSION: ANALOG  
 R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
 TEMPERATURE RANGE: -30 TO +60 DEG. C.  
 8 CHARACTER MINIMUM, ALPHA-NUMERIC DISPLAY, BACKLIT  
 R.F. SYNTHESIZED  
 P.C. PROGRAMMABLE WITH UNIT CLONING VIA P.C.  
 CTCSS AND DCSS CAPABILITY, ALL EIA TONES AND DIGITAL CODES  
 RECEIVER CHANNEL MONITOR BUTTON  
 OPERATOR PROGRAMMABLE PRIORITY CTCSS/DCSS SCAN  
 SQUELCH TAIL ELIMINATION  
 BUSY CHANNEL INDICATOR  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER, ADJUSTABLE  
 STANDARD MOBILE MICROPHONE  
 INTERNAL SPEAKER  
 INTERNAL PUBLIC ADDRESS AMPLIFIER (P.A.)  
 12 VDC, NEGATIVE GROUND, PRIMARY POWER  
 COMPLETE MOUNTING HARDWARE AND WIRING HARNESSSES  
 MEETS MIL810 SPECIFICATIONS FOR SHOCK AND VIBRATION

TRANSMITTER:

R.F. OUTPUT POWER: 25W.  
 FREQ. SPREAD, FULL SPECS.: 24/20  
 FREQ. STABILITY: +/- 2.5 PPM  
 SPURIOUS & HARMONICS: -70 DB.  
 FM HUM AND NOISE: -45 DB WB, -40 DB NB.  
 AUDIO DISTORTION: 3% @ 1 KHZ WB, 5% @ 1 KHZ NB.  
 EMISSIONS: 11K0F3E, 16K0F3E.

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.28 UV WB, 0.35 UV NB.  
 SELECTIVITY: -75 DB WB, -65 DB NB.  
 INTERMODULATION: -70 DB WB, -60 DB NB.  
 SPURIOUS & IMAGE REJECTION: -75 DB.  
 AUDIO POWER @ DISTORTION: 4W @ 5%  
 FREQ. SPREAD, FULL SPECS., 24/20 MHZ

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

ILLUMINATED DTMF MICROPHONE,  
 EXTERNAL SPEAKER,  
 A. C. POWER SUPPLY,  
 CONTROL STATION DESK TOP MICROPHONE,  
 FACTORY PROGRAMMING

II. AVAILABLE VENDOR OPTIONS:

1/4 GAIN MOBILE ANTENNAS WITH 3/4" HOLE MOUNT OR ON-GLASS MOUNTING &

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1/4 GAIN MOBILE ANTENNAS WITH 3/4" HOLE MOUNT OR ON-GLASS MOUNTING & SILVER PLATED CONNECTORS,  
WEATHER PROOF P.A. SPEAKER

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CATEGORY 104 - VHF HIGH BAND 50W DIGITAL MOBILE RADIO

THIS CATEGORY IS FOR VHF HIGH-BAND, 512 CHANNEL, FRONT-MOUNT, P25 COMPATIBLE DIGITAL MOBILE RADIOS

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 136 - 174 MHZ.

CHANNELS: 512

ZONES OR CHANNEL GROUPS: 50

SCAN LISTS: 16 WITH 31 CHANNELS PER LIST

CHANNEL SPACING: 12.5/15/20/25/30 KHZ. ANALOG - 12.5 KHZ. DIGITAL

MODE OF OPERATION: SIMPLEX AND HALF DUPLEX

EMISSION: ANALOG AND P25 DIGITAL, IMBE VOCODING

R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS

TEMPERATURE RANGE: -30 TO +60 DEG. C.

ALPHA-NUMERIC, ILLUMINATED, CONTROL PANEL

R.F. SYNTHESIZED

P.C. PROGRAMMABLE WITH UNIT CLONING VIA P.C.

P.C. ASSIGNABLE BUTTON FUNCTIONS

CTCSS AND DCSS CAPABILITY

OPERATOR PROGRAMMABLE PRIORITY CTCSS/DCSS SCAN

SQUELCH TAIL ELIMINATION

REPEATER TALK AROUND (DIRECT) BUTTON

BUSY CHANNEL TRANSMIT INHIBIT WITH BUSY CHANNEL INDICATOR

TRANSMITTER VSWR PROTECTION

TRANSMIT TIME LIMITER, ADJUSTABLE

STANDARD MOBILE MICROPHONE

INTERNAL SPEAKER

AUDIO SOURCE FOR WEATHER PROOF P.A. SPEAKER

COMPLETE MOUNTING HARDWARE AND WIRING HARNESSSES

TRANSMITTER:

R.F. OUTPUT POWER: 50 W.

FREQ. SPREAD, FULL SPECS.: 38 MHZ.

FREQ. STABILITY: +/- 2.0 PPM

SPURIOUS & HARMONICS: -70 DB.

FM HUM AND NOISE: -40 DB.

AUDIO DISTORTION: LESS THAN 2% @ 1 KHZ.

EMISSIONS: 11K0F3E, 16K0F3E

8K10F1E, 8K10F1D.

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.25 UV.

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R.F. SENSITIVITY (12 DB. SINAD): 0.25 UV.  
 SELECTIVITY DIGITAL: -60 DB.  
 ANALOG @ 12.5 KHZ.: -76 DB.  
 ANALOG @ 25/30 KHZ.: -83 DB.  
 INTERMODULATION: -80 DB.  
 SPURIOUS & IMAGE REJECTION: -90 DB.  
 AUDIO POWER @ DISTORTION: 1.5 W. @ 3%  
 FREQ. SPREAD, FULL SPECS.: 38 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

ILLUMINATED DTMF MICROPHONE,  
 EXTERNAL SPEAKER,  
 A. C. POWER SUPPLY,  
 CONTROL STATION DESK TOP MICROPHONE,  
 FACTORY PROGRAMMING

II. AVAILABLE VENDOR OPTIONS:

1/4 WAVE AND GAIN MOBILE ANTENNAS WITH 3/4" HOLE MOUNTING AND SILVER  
 PLATED CONNECTORS,  
 WEATHER PROOF P.A. SPEAKER

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CATEGORY 105- VHF HIGH BAND/UHF 160 CHANNEL DUAL CONTROL HEAD  
 MOBILE RADIO

THIS CATEGORY IS FOR VHF HIGH-BAND AND UHF, 160 CHANNEL, REAR-MOUNT,  
 ANALOG, MOBILE RADIOS WITH DUAL (FRONT AND REAR) CONTROL HEADS

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
 BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 150 - 174/450 -470 MHZ.  
 CHANNELS: 160  
 CHANNEL SPACING: 12.5 AND 30 KHZ. (VHF), 12.5 AND 25 KHZ. (UHF)  
 MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
 EMISSION: ANALOG  
 R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
 TEMPERATURE RANGE: -30 TO +60 DEG. C.  
 ALPHA-NUMERIC, ILLUMINATED, REMOTE MOUNT CONTROL HEAD, 14 CHARACTERS  
 MINIMUM PER LINE  
 R.F. SYNTHESIZED  
 P.C. PROGRAMMABLE WITH UNIT CLONING VIA P.C.  
 P.C. ASSIGNABLE BUTTON FUNCTIONS  
 CTCSS AND DCSS CAPABILITY, ALL EIA TONE AND DIGITAL CODES  
 OPERATOR PROGRAMMABLE PRIORITY CTCSS/DCSS SCAN

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OPERATOR PROGRAMMABLE PRIORITY CTCSS/DCSS SCAN

OPERATOR PROGRAMMABLE HOME CHANNEL  
 SQUELCH TAIL ELIMINATION  
 REPEATER TALK AROUND (DIRECT) BUTTON  
 BUSY CHANNEL TRANSMIT INHIBIT WITH BUSY CHANNEL INDICATOR  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER, ADJUSTABLE  
 STANDARD MOBILE MICROPHONE  
 STANDARD EXTERNAL MOBILE SPEAKER (I.E. NOT WITHIN RADIO ENCLOSURE)  
 AUDIO SOURCE FOR WEATHER PROOF P.A. SPEAKER  
 KEYLOCK RADIO MOUNT  
 COMPLETE MOUNTING HARDWARE, CONTROL CABLING, AND WIRING HARNESSES  
 TRANSMITTER:  
 R.F. OUTPUT POWER: 100/75 W.  
 FREQ. SPREAD, FULL SPECS.: 24/20 MHZ  
 FREQ. STABILITY: +/- 2/2 PPM  
 SPURIOUS & HARMONICS: -80 DB.  
 FM HUM AND NOISE: -43 DB. NB. / -50 DB. WB.  
 AUDIO DISTORTION: 3% @ 1 KHZ..  
 EMISSIONS: 11K0F3E, 16K0F3E  
 RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.35 UV.  
 SELECTIVITY @ 12.5 KHZ.: -65 DB.  
                   @ 25.0 KHZ.: -75 DB.  
                   @ 30.0 KHZ.: -80 DB.  
 INTERMODULATION: -70 DB. NB. / -80 DB. WB.  
 SPURIOUS & IMAGE REJECTION: -90/ -90 DB.  
 AUDIO POWER @ DISTORTION: 7.5 W. @ 3%  
 FREQ. SPREAD, FULL SPECS.: 24/20 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

ILLUMINATED DTMF MICROPHONE, 25 FT. CONTROL CABLES,  
 FACTORY PROGRAMMING.

II. AVAILABLE VENDOR OPTIONS:

1/4 WAVE AND GAIN MOBILE ANTENNAS WITH 3/4" HOLE MOUNTING AND SILVER  
 PLATED CONNECTORS,  
 WEATHER PROOF P.A. SPEAKER,  
 DTMF ENCODING CAPABILITY,  
 PTT HEADSET AND PTT HANDSET OPTIONS FOR REAR CONTROL HEAD,  
 DTMF SELECTIVE CALL DECODING WITH HEADLIGHT AND HORN ALERTING.

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 CATEGORY 106- VHF HIGH BAND/UHF PASSPORT TRUNKING MOBILE RADIO

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CATEGORY 106- VHF HIGH BAND/UHF PASSPORT TRUNKING MOBILE RADIO

THIS CATEGORY IS FOR VHF/UHF, 30 WATT, 512 CHANNEL, FRONT-MOUNT, ANALOG, MOBILE RADIOS COMPATIBLE WITH TN HOMELAND SECURITY DISTRICT 7 UHF PASSPORT SYSTEM

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 136 - 174/400 - 470 MHZ.  
CHANNELS: 512  
ZONES: 128  
DUAL PRIORITY AND MULTI-ZONE SCAN WITH TALKBACK SCAN  
CHANNEL SPACING: 12.5/15/25/30 KHZ. / 12.5/25 KHZ.  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG  
R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
NUMERIC DISPLAY (ALPHA-NUMERIC ACCEPTABLE)  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE WITH UNIT CLONING VIA P.C.  
CTCSS AND DCSS CAPABILITY  
RECEIVER CHANNEL MONITOR BUTTON  
OPERATOR PROGRAMMABLE PRIORITY CTCSS/DCSS SCAN  
SQUELCH TAIL ELIMINATION  
BUSY CHANNEL INDICATOR  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE  
STANDARD MOBILE MICROPHONE  
INTERNAL SPEAKER  
12 VDC, NEGATIVE GROUND, PRIMARY POWER  
COMPLETE MOUNTING HARDWARE AND WIRING HARNESSSES  
MEETS MIL810 SPECIFICATIONS FOR SHOCK AND VIBRATION

TRANSMITTER:

R.F. OUTPUT POWER: 30/30W.  
FREQ. SPREAD, FULL SPECS.: 38/70  
FREQ. STABILITY: +/- 3 PPM  
SPURIOUS & HARMONICS: -70/-70 DB.  
FM HUM AND NOISE: -50 DB. WIDE -45 DB. NARROW  
AUDIO DISTORTION: 3% @ 1 KHZ.  
EMISSIONS: 16K0F3E / 11K0F3E  
RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.28/0.28 UV.  
SELECTIVITY

@ 12.5/15 KHZ.: -70/-67 DB.

@ 25/30.0 KHZ.: -80/-80 DB.

INTERMODULATION: -75 DB.

SPURIOUS & IMAGE REJECTION: -90/-85 DB.

AUDIO POWER @ DISTORTION: 4 W. @ 5%

FREQ. SPREAD, FULL SPECS.: 38/70 MHZ



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\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

ILLUMINATED DTMF MICROPHONE,  
EXTERNAL SPEAKER,  
A. C. POWER SUPPLY,  
CONTROL STATION DESK TOP MICROPHONE,  
FACTORY PROGRAMMING

II. AVAILABLE VENDOR OPTIONS:

1/4 GAIN MOBILE ANTENNAS WITH 3/4" HOLE OR ON-GLASS MOUNTING & SILVER  
PLATED CONNECTORS,  
WEATHER PROOF P.A. SPEAKER

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CATEGORY 107- VHF HIGH BAND/UHF DIGITAL 100W MOBILE RADIO

THIS CATEGORY IS FOR VHF HIGH-BAND AND UHF, 255 CHANNEL, REAR-MOUNT,  
APCO-25 COMPATIBLE DIGITAL MOBILE RADIOS

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 150 - 174/450 -470 MHZ.

CHANNELS: 255

CHANNEL SPACING: 12.5 AND 30 KHZ. (VHF), 12.5 AND 25 KHZ. (UHF)

MODE OF OPERATION: SIMPLEX AND HALF DUPLEX

EMISSION: ANALOG AND APCO 25 DIGITAL, IMBE VOCODING

R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS

TEMPERATURE RANGE: -30 TO +60 DEG. C.

ALPHA-NUMERIC, ILLUMINATED, REMOTE MOUNT CONTROL HEAD, 11 CHARACTER  
MINIMUM

R.F. SYNTHESIZED

P.C. PROGRAMMABLE WITH UNIT CLONING VIA P.C.

P.C. ASSIGNABLE BUTTON FUNCTIONS

CTCSS AND DCSS CAPABILITY, ALL EIA TONE AND DCSS CODES

OPERATOR PROGRAMMABLE PRIORITY CTCSS/DCSS SCAN

SQUELCH TAIL ELIMINATION

REPEATER TALK AROUND (DIRECT) BUTTON

BUSY CHANNEL TRANSMIT INHIBIT WITH BUSY CHANNEL INDICATOR

TRANSMITTER VSWR PROTECTION

TRANSMIT TIME LIMITER, ADJUSTABLE

STANDARD MOBILE MICROPHONE

STANDARD EXTERNAL MOBILE SPEAKER (I.E. NOT WITHIN RADIO ENCLOSURE)

AUDIO SOURCE FOR WEATHER PROOF P.A. SPEAKER

KEYLOCK RADIO MOUNT

COMPLETE MOUNTING HARDWARE, CONTROL CABLING, AND WIRING HARNESSSES  
MEETS MIL810 SPECIFICATIONS FOR SHOCK AND VIBRATION

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MEETS MIL810 SPECIFICATIONS FOR SHOCK AND VIBRATION

TRANSMITTER:

R.F. OUTPUT POWER: 100/100W.  
 FREQ. SPREAD, FULL SPECS.: 24/20 MHZ.  
 FREQ. STABILITY: +/- 2.5/2 PPM  
 SPURIOUS & HARMONICS: -70 DBC.  
 FM HUM AND NOISE: -45 DB WB, -40 DB NB.  
 AUDIO DISTORTION: 2.5% @ 1 KHZ.  
 EMISSIONS: 11K0F3E, 16K0F3E  
 8K10F1D, 20K0F1D.

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.30 UV. (25 KHZ. CH.)  
 SELECTIVITY: -85/-80 DB WB, -70/-70 DB NB.  
 INTERMODULATION: -85 DB.  
 SPURIOUS & IMAGE REJECTION: -90 DB.  
 AUDIO POWER @ DISTORTION: 7.5 W. @ 3%  
 FREQ. SPREAD, FULL SPECS.: 24/20 MHZ

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:  
 ILLUMINATED DTMF MICROPHONE,  
 FACTORY PROGRAMMING

II. AVAILABLE VENDOR OPTIONS:

1/4 WAVE AND GAIN MOBILE ANTENNAS WITH 3/4" HOLE MOUNTING AND SILVER  
 PLATED CONNECTORS,  
 WEATHER PROOF P.A. SPEAKER

-----  
 CATEGORY 108- VHF HIGH BAND/UHF, 110W P25 DIGITAL MOBILE RADIO  
 W/ ENCRYPTION

THIS CATEGORY IS FOR VHF HIGH-BAND AND UHF, 512 CHANNEL, REAR-MOUNT,  
 P25 DIGITAL, DES-OFB ENCRYPTED MOBILE RADIOS FULLY COMPATIBLE WITH  
 TENNESSEE BUREAU OF INVESTIGATION'S MOTOROLA XTL 5000 SYSTEM.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
 BELOW LISTED FEATURES AS STANDARD

FREQUENCY BAND: 136 - 174/380 - 470 MHZ.

CHANNELS: 512

CHANNEL SPACING: 12.5 AND 30 KHZ. (VHF), 12.5 AND 25 KHZ. (UHF)

MODE OF OPERATION: SIMPLEX AND HALF DUPLEX

EMISSION: ANALOG AND P25 DIGITAL, IMBE VOCODING

R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS

TEMPERATURE RANGE: -30 TO +60 DEG. C.

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TEMPERATURE RANGE: -30 TO +60 DEG. C.  
 ALPHA-NUMERIC, ILLUMINATED, REMOTE MOUNT HAND-HELD CONTROL HEAD, 14  
 CHARACTER MINIMUM WITH INTEGRAL MICROPHONE  
 R.F. SYNTHESIZED  
 P.C. PROGRAMMABLE WITH UNIT CLONING VIA P.C.  
 P.C. ASSIGNABLE BUTTON FUNCTIONS  
 CTCSS AND DCSS CAPABILITY, ALL EIA TONE AND DCSS CODES  
 OEM MULTI-KEY DES-OFB ENCRYPTION  
 HOME BUTTON TO RETURN TO SOFTWARE DEFINED DEFAULT CHANNEL  
 OPERATOR PROGRAMMABLE PRIORITY CTCSS/DCSS SCAN  
 SQUELCH TAIL ELIMINATION  
 REPEATER TALK AROUND (DIRECT) BUTTON  
 BUSY CHANNEL TRANSMIT INHIBIT WITH BUSY CHANNEL INDICATOR  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER, ADJUSTABLE  
 STANDARD EXTERNAL MOBILE SPEAKER (I.E. NOT WITHIN RADIO ENCLOSURE)  
 AUDIO SOURCE FOR WEATHER PROOF P.A. SPEAKER  
 KEYLOCK RADIO MOUNT  
 COMPLETE MOUNTING HARDWARE, CONTROL CABLING, AND WIRING HARNESSSES  
 MEETS MIL810 SPECIFICATIONS FOR SHOCK AND VIBRATION

TRANSMITTER:

R.F. OUTPUT POWER: 110W  
 FREQ. SPREAD: FULL BANDSPLIT.  
 FREQ. STABILITY: +/- 2.0 PPM.  
 SPURIOUS & HARMONICS: -85 DBC.  
 FM HUM AND NOISE: -50/-45 DB WB, -40/-40 DB NB.  
 AUDIO DISTORTION: 2% @ 1 KHZ  
 EMISSIONS: 11K0F3E, 16K0F3E  
 8K10F1D, 20K0F1D

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.30 UV.  
 SELECTIVITY: -85/-82 DB WB, -70/-75 DB NB.  
 INTERMODULATION: -85 DB.  
 SPURIOUS & IMAGE REJECTION: -90 DB.  
 AUDIO POWER @ DISTORTION: 7.5 W @ 3%  
 FREQ. SPREAD: FULL BANDSPLIT.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\* \*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

ALPHA-NUMERIC, ILLUMINATED, REMOTE MOUNT CONTROL HEAD, 14 CHARACTER  
 MINIMUM WITH ILLUMINATED DTMF MICROPHONE,  
 FACTORY PROGRAMMING

II. AVAILABLE VENDOR OPTIONS:

1/4 WAVE AND GAIN MOBILE ANTENNAS WITH 3/4" HOLE MOUNTING AND  
 SILVER PLATED CONNECTORS,

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SILVER PLATED CONNECTORS,  
WEATHER PROOF P.A. SPEAKER,

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CATEGORY 109- 800 MHZ. CONVENTIONAL ANALOG MOBILE RADIO

THIS CATEGORY IS FOR 800 MHZ. CONVENTIONAL ANALOG 48 CHANNEL, 30 WATT,  
FRONT-MOUNT, ANALOG, MOBILE RADIOS.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 806-870 MHZ  
CHANNELS: 48  
CHANNEL SPACING: 12.5 (NPSPAC) AND 25 KHZ  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG  
R.F. IMPEDANCE, RECIEVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG C.  
8 CHARACTER MINIMUM. ALPHA-NUMERIC DISPLAY, BACKLIT  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE WITH UNIT CLONING VIA P.C.  
CTCSS AND DCSS CAPABILITY  
RECEIVER CHANNEL MONITOR BUTTON  
OPERATOR PROGRAMMABLE PRIORITY CTCSS/DCSS SCAN  
SQUELCH TAIL ELIMINATION  
REPEATER TALK AROUND (DIRECT) BUTTON  
BUSY CHANNEL TRANSMIT INHIBIT WITH BUSY CHANNEL INDICATOR  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE  
STANDARD MOBILE MICROPHONE  
INTERNAL SPEAKER  
AUDIO SOURCE FOR WEATHER PROOF P.A. SPEAKER  
12 VDC, NEGATIVE GROUND, PRIMARY POWER  
COMPLETE MOUNTING HARDWARE AND WIRING HARNESSSES  
MEETS MIL810 SPECIFICATIONS FOR SHOCK AND VIBRATION

TRANSMITTER:

R.F. OUTPUT POWER: 30W.  
FREQ. SPREAD, FULL SPECS.: 806 - 825; 851 - 869 MHZ.  
FREQ. STABILITY: +/- 1.5 PPM  
CONDUCTED SPURIOUS EMISSIONS: -70 DBC.  
FM HUM AND NOISE @ 25.0 KHZ: -40 DB.  
AUDIO DISTORTION: 3% @ 1 KHZ.  
EMISSIONS: 11K0F3E, 16K0F3E

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.3 UV.  
SELECTIVITY @ 25.0 KHZ.: -75 DB.

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SELECTIVITY @ 25.0 KHZ.: -75 DB.  
INTERMODULATION @ 25.0 KHZ.: -80 DB.  
SPURIOUS & IMAGE REJECTION: -80 DB.  
AUDIO POWER @ DISTORTION: 3 W. @ 5%  
FREQ. SPREAD, FULL SPECS.: 851 - 869 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

ILLUMINATED DTMF MICROPHONE,  
EXTERNAL SPEAKER,  
A. C. POWER SUPPLY,  
CONTROL STATION DESK TOP MICROPHONE,  
FACTORY PROGRAMMING

II. AVAILABLE VENDOR OPTIONS:

GAIN MOBILE ANTENNAS WITH 3/4" HOLE OR ON-GLASS MOUNTING,  
WEATHER PROOF P.A. SPEAKER,  
RG-8/U COAXIAL CABLE  
PL-259 CONNECTOR FOR RG-8/U CABLE  
N-MALE CONNECTOR FOR RG-8/U CABLE

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CATEGORY 110 - 800 MHZ TRUNKED ANALOG / DIGITAL MOBILE RADIO

THIS CATEGORY IS FOR TRUNKED, 800 MHZ., FRONT AND/OR REAR MOUNT,  
MOBILE RADIOS, FULLY COMPATIBLE WITH P25 CAI IMBE TRUNKING PROTOCOLS A  
USED IN THE EXISTING TEMA / DEPT OF SAFETY TRUNKED RADIO  
MOTOROLA ASTRO & STL MOBILES SYSTEMS.  
ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 764 - 869 MHZ.  
CHANNELS IN CONVENTIONAL OPERATION: 16  
NPSPAC CHANNEL CAPABLE  
CHANNEL SPACING: 12.5 (NPSPAC) AND 25 KHZ.  
TRANSCEIVER OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG OR DIGITAL  
R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
BACKLIT LCD ALPHA-NUMERIC DISPLAY  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
EMERGENCY CALL/ALARM FEATURE  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE  
STANDARD MOBILE MICROPHONE  
INTERNAL OR EXTERNAL SPEAKER

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INTERNAL OR EXTERNAL SPEAKER  
 AUDIO SOURCE FOR WEATHER PROOF P.A. SPEAKER  
 12 VDC, NEGATIVE GROUND, PRIMARY POWER  
 COMPLETE MOUNTING HARDWARE AND WIRING HARNESSSES  
 PUSH TO TALK UNIT IDENTIFICATION  
 EMERGENCY RESPONSE CAPABILITY

TRANSMITTER:

R.F. OUTPUT POWER: 35W.  
 FREQ. SPREAD, FULL SPECS.:  
 806-825 MHZ / 851-869 MHZ & 764-776 MHZ / 794-806 MHZ  
 FREQ. STABILITY: +/- 1.5 PPM  
 EMISSIONS CONDUCTED OR RADIATED: -70/-85 DBC.  
 FM HUM AND NOISE: -40 DB WB, -34 DB NB.  
 AUDIO DISTORTION: 2% @ 1 KHZ.  
 EMISSIONS: 16K0F3E

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.25 UV.  
 SELECTIVITY: -80 DB WB, -65 DB NB.  
 INTERMODULATION: -80 DB.  
 SPURIOUS & IMAGE REJECTION: -80 DB.  
 AUDIO POWER @ DISTORTION: 3% @ 7.5 W.  
 FREQ. SPREAD, FULL SPECS.: 851-869 MHZ & 764-776 MHZ

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

ILLUMINATED DTMF MICROPHONE,  
 EXTERNAL SPEAKER,  
 A. C. POWER SUPPLY,  
 CONTROL STATION DESK TOP MICROPHONE,  
 FACTORY PROGRAMMING

II. AVAILABLE VENDOR OPTIONS:

MOBILE ANTENNAS WITH 3/4" HOLE OR ON-GLASS MOUNTING  
 VEHICULAR REPEATERS  
 SIREN & SIREN SPEAKER  
 WEATHER PROOF P.A. SPEAKER

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 CATEGORY 111 - VHF HIGH BAND/UHF/700/800 MHZ SYNTHESIZED VEHICLE  
 REPEATER

THIS CATEGORY IS FOR VHF/UHF/700/800 MHZ, 2/2/0.6/0.6 WATT, SINGLE  
 CHANNEL, ANALOG, SYNTHESIZED VEHICLE REPEATER TO BE COMPATIBLE WITH  
 EXISTING TDOT MOBILE RADIO EQUIPMENT

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EXISTING TDOT MOBILE RADIO EQUIPMENT  
PYRAMID SVR-200 RADIO SYSTEMS.

ALL VEHICLE REPEATERS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH  
THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 150 - 174 / 450 - 470 / 764 - 776 & 794 - 806 / 806 -  
824 & 851 - 869 MHZ.

CHANNELS: 1

MODE OF OPERATION: SIMPLEX

EMISSION MODE: ANALOG

TEMPERATURE RANGE: - 30 TO + 60 DEG. C

R.F. SYNTHESIZED

PROGRAMMING USING PERSONAL COMPUTER

NARROWBAND AND WIDEBAND OPERATION

PROGRAMMABLE CHANNEL

IN-BAND REPEAT CAPABLE

"FIRST MAN OUT" WITH PRIORITY SAMPLING CAPABLE

COMPATIBLE WITH THE KENWOOD TK 690/790/890 RADIOS

TRANSMITTER:

R.F. OUTPUT POWER: 0.25 - 2 / 0.25 - 2 / 0.1 - 0.6 / 0.1 - 0.6 W.

FREQ. STABILITY: +/- 1.5 PPM

SUPRIIOUS EMISSIONS: - 50 / -52 / -45 / -45DBC.

FM HUM AND NOISE: -40DB

AUDIO DISTORTION: <3% @ 60% DEVIATION

MODULATION TYPES: 11K0F3E, 16K0F3E / 16K0F3E / 11K0F3E, 16K0F3E

RECEIVER:

R.F. SENSITIVITY: 0.35 UV

SQUELCH SENSITIVITY: 0.2 UV TO 2.0 UV ADJUSTABLE

SELECTIVITY: 60DB / 60DB/ 50DB/ 50DB

INTERMODULATION: 60DB

SPURIOUS & IMAGE REJECTION: 60DB

FREQUENCY STABILITY: +/- 1.5 PPM

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING

IN BAND FILTERS (VHF & UHF)

FACTORY SUPPLIED SPECIFIC MOBILE RADIO MODEL TO VEHICLE REPEATER  
INTERFACE CABLES

II. AVAILABLE VENDOR OPTIONS:

RG-8/U COAXIAL CABLE

PL-259 CONNECTOR FOR RG-8/U CABLE

N-MALE CONNECTOR FOR RG-8/U CABLE

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CATEGORY 112 VHF HIGH / UHF /700/800 MHZ VEHICULAR REPEATER

THIS CATEGORY IS FOR VHF HIGH BAND, UHF, 700/800 MHZ VEHICULAR REPEATER THESE VEHICULAR REPEATERS ARE TO BE COMPATIBLE WITH EXISTING DEPARTMENT OF CORRECTION RADIOS. ALSO TO BE COMPATIBLE WITH MOBEXCOM P25 VEHICULAR REPEATER.

ALL REPEATERS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW FEATURES AS STANDARD.

FREQUENCY BAND:	VHF	UHF	700/800 MHZ
	-----	-----	-----
	136-174 MHZ	403-470 MHZ	764-767 MHZ
		450-470 MHZ	773-776 MHZ
		470-512 MHZ	794-797 MHZ
			803-806 MHZ
			806-825 MHZ
			851-869MHZ

CHANNEL: 32

CHANNEL SPACING : 12.5 OR 25 KHZ

TEMPERATURE RANGE: -30 TO +60 DEG. C.

R.F. SYNTHESIZED

P.C. PROGRAMMABLE

DUTY CYCLE: CONTINUOUS

CTCS/CDSS (PL/DPL) OPERATION: PROGRAMMABLE PER CHANNEL

POWER SUPPLY: 13.8 VDC +/- 20 %NEGATIVE GROUND

DC CURRENT DRAIN:

REPEATER OFF: 0.01A MAX

REPEATER STAND BY: 0.8A MAX

REPEATER IN RECEIVE: 1.7A MAX @7.5W AUDIO @ 13.8 VDC

REPEATER IN TRANSMIT: 4.5 A MAX @ 10W RF MAXIMUM OUTPUT AT TX PORT

PROTECTION AGAINST LIQUIDS: IP6 (JET WATER PROOF)

TRANSMITTER:

RF OUTPUT POWER AT TX PORT: 10 WATTS PROGRAMMABLE PER CHANNEL FROM CARRIER CONTROL TIMER OPTION: 15 SEC TO 15 MINUTES OR AS DESIRED

FREQUENCY STABILITY: +/- 1.5PPM

FM HUM AND NOISES: 12.5 KHZ 37 DB

25.0 KHZ 43 DB

AUDIO SENSITIVITY: 80 MV RMS

AUDIO SENSITIVITY (MOB. DET. AUDIO): 600 MV RMS

AUDIO DISTORTION: <2%

RECEIVER:

SENSITIVITY, MAX: -118 DB @12 DB SINAD

FREQUENCY STABILITY: +/- 1.5 PPM



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FREQUENCY STABILITY: +/- 1.5 PPM

INTERMODULATION: 70 DB

SPURIOUS RESPONSE: 70 DB

AUDIO DISTORTION: 3%

SELECTIVITY: VHF UHF 700/800MHZ

12.5 KHZ 70 DB 65 DB 65 DB

25 KHZ 80 DB 77 DB 77 DB

RATED DEVIATION:

12.5 KHZ: +/- 2.5KHZ

25 KHZ: +/- 5KHZ

FM HUM AND NOISE:

12.5 KHZ 37DB

25 KHZ 43 DB

AUDIO OUTPUT (REPEATER DETECT AUDIO): 600 MV RMS NOMINAL, FLAT RESPONSE

AUDIO RESPONSE: +1, -3DB/OCTAVE DE-EMPHASIS CHARACTERISTIC OVER 300 HZ TO 3KHZ

AUDIO DISTORTION: <3%

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

#### I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING

IN BAND FILTERS (VHF & UHF)

FACTORY SUPPLIED SPECIFIC MOBILE RADIO MODEL TO VEHICLE REPEATER INTERFACE CABLES

#### II. AVAILABLE VENDOR OPTIONS:

RG-8/U COAXIAL CABLE

PL-259 CONNECTOR FOR RG-8/U CABLE

N-MALE CONNECTOR FOR RG-8/U CABLE

CATEGORY: PORTABLE RADIO'S

CATEGORY 200 - VHF LOW / HIGH BAND/UHF BAND 128 CHANNEL 6/5/4W. INTRINSICLY SAFE PORTABLE RADIO WITH MAN DOWN

THIS CATEGORY IS FOR LOW/HIGH VHF/UHF, 6/5/4 WATT, 128 CHANNEL, ANALOG, PORTABLE THAT IS FACTORY MUTUAL APPROVED FOR HAZARD ENVIRONMENTS AND MAN DOWN EMERGENCY BUTTON

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD AND COMPATATIBLE WITH HT750/HT1250 PORTABLE RADIOS.

FREQUENCY BAND: 37-50 / 136 - 174/440 - 470 MHZ.  
CHANNELS: 128

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CHANNELS: 128  
CHANNEL SPACING: 20/25 KHZ LB /12.5 / 20 AND 25 KHZ V/U.  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE WITH P.C. AND DIRECT UNIT-TO-UNIT CLONING  
CTCSS AND DCSS CAPABILITY, ALL EIA TONES AND DIGITAL CODES  
OPERATOR PROGRAMMABLE PRIORITY CTCSS AND DCSS SCAN  
RECEIVER CHANNEL MONITOR BUTTON  
TRANSMIT TALK-AROUND (SIMPLEX) BUTTON  
DTMF ENCODING PAD  
SQUELCH TAIL ELIMINATION  
HIGH/LOW POWER SWITCH OR BUTTON  
PER-CHANNEL POWER PROGRAMMING  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE  
PUSH TO TALK IDENTIFICATION ENCODE AND DECODE, MDC 1200 SIGNALING  
FORMAT EMERGENCY RESPONSE BUTTON, MAN DOWN, MDC1200 SIGNALING FORMAT  
INTRINSICIALLY SAFE FM APPROVALS FOR USE IN CLASSES I, II, III,  
DIVISION 1, GROUP C,D,E,F AND G AS WELL AS NON-INCENDIVE USE IN  
CLASS I, DIVISION 2, GROUPS A,B,C AND D  
14 CHARACTER ALPHANUMERIC DISPLAY  
BATTERY LIFE INDICATION GUAGE

TRANSMITTER:

R.F. OUTPUT POWER: 6/5/4W.  
FREQ. SPREAD, FULL SPECS.: 12/24/20  
FREQ. STABILITY: +/- 10PPM LB / 5 PPM V/U  
SPURIOUS & HARMONICS: -36 DBM BELOW 1 GHZ.  
FM HUM AND NOISE: -40 DB.  
AUDIO DISTORTION: 3% @ 1 KHZ.  
EMISSIONS: 11K0F3E EXCEPT LB, 16K0F3E

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.30UV LB / 0.25 UV V/U.  
SELECTIVITY NB: -60 DB.  
WB: -70 DB.  
INTERMODULATION: -70 DB.  
SPURIOUS REJECTION: -57 DBM.  
AUDIO POWER @ DISTORTION: 0.5 W. @ 3%  
FREQ. SPREAD, FULL SPECS.: 12/24/20 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FM APPROVED INTRINSICIALLY SAFE BATTERIES,  
MULTI UNIT AND DESK-TOP RAPID CHARGER,  
SPEAKER/MICROPHONE,  
LEATHER SWIVEL CARRYING CASE WITH 3- INCH BELT LOOP.  
BONE CONDUCTION HEADSETS

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BONE CONDUCTION HEADSETS  
RADIO CHANNELS PROGRAMMABLE BY ZONES  
MDC1200 SIGNALING ENCODE AND DECODE

## II. AVAILABLE VENDOR OPTIONS

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
RG-58/U COAXIAL CABLE  
PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
N-MALE CONNECTOR FOR RG-58/U CABLE  
BNC-MALE CONNECTOR FOR RG-58/U CABLE

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CATEGORY 201 - VHF HIGH BAND 512 CHANNEL 5W. DIGITAL P25 PORTABLE RADIO

THIS CATEGORY IS FOR VHF, 5 WATT, 512 CHANNEL, DIGITAL P25 PORTABLE

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 136 - 174 MHZ.  
CHANNELS: 512  
ZONES OR CHANNEL GROUPS: 50  
SCAN LISTS: 16 WITH 31 CHANNELS PER LIST  
CHANNEL SPACING: 12.5/15/20/25/30 KHZ. ANALOG - 12.5 KHZ. DIGITAL  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG AND P25 DIGITAL, IMBE VOCODING  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
CTCSS AND DCSS CAPABILITY  
SQUELCH TAIL ELIMINATION  
OPERATOR PROGRAMMABLE PRIORITY SCAN  
RECEIVER CHANNEL MONITOR BUTTON  
TRANSMIT TALK-AROUND (SIMPLEX) BUTTON  
ILLUMINATED DTMF ENCODING PAD  
SELECTIVE CALL DECODING  
AUTOMATIC ANI ENCODING  
HIGH//LOW POWER SWITCH OR BUTTON  
PER-CHANNEL POWER PROGRAMMING  
BACK LIT LCD ALPHA-NUMERIC DISPLAY  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE

### TRANSMITTER:

R.F. OUTPUT POWER: 5W.  
FREQ. SPREAD, FULL SPECS.: 38 MHZ.  
FREQ. STABILITY: +/- 2 PPM  
SPURIOUS & HARMONICS: -70 DB.

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SPURIOUS & HARMONICS: -70 DB.  
FM HUM AND NOISE: -45 DB.  
AUDIO DISTORTION: 2% @ 1 KHZ.  
EMISSIONS: 11K0F3E, 16K0F3E  
8K10F1E, 8K10F1D.

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.25 UV.  
SELECTIVITY DIGITAL: -60 DB.  
ANALOG @ 12.5 KHZ.: -67 DB.  
ANALOG @ 25/30 KHZ.: -78 DB.  
INTERMODULATION: -75 DB  
SPURIOUS & IMAGE REJECTION: -80 DB.  
AUDIO POWER @ DISTORTION: 0.5 W. @ 2%  
FREQ. SPREAD, FULL SPECS.: 38 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING,  
STANDARD & HIGH CAPACITY BATTERIES,  
DESK-TOP RAPID CHARGER,  
SPEAKER/MICROPHONE

AVAILABLE VENDOR OPTIONS:

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
RG-58/U COAXIAL CABLE  
PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
N-MALE CONNECTOR FOR RG-58/U CABLE  
BNC-MALE CONNECTOR FOR RG-58/U CABLE

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CATEGORY 202- VHF HIGH BAND/UHF 16 CHANNEL 5/4W. PORTABLE RADIO

THIS CATEGORY IS FOR VHF/UHF, 5/4 WATT, 16 CHANNEL, ANALOG, PORTABLE RADIOS

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 150 - 174/450 - 470 MHZ.  
CHANNELS: 16  
CHANNEL SPACING: 12.5 AND 30 KHZ./ 12.5 AND 25 KHZ.  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE WITH P.C. AND DIRECT UNIT-TO-UNIT CLONING

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P.C. PROGRAMMABLE WITH P.C. AND DIRECT UNIT-TO-UNIT CLONING  
 CTCSS AND DCSS CAPABILITY, ALL EIA TONES AND DIGITAL CODES  
 OPERATOR PROGRAMMABLE PRIORITY CTCSS AND DCSS SCAN  
 RECEIVER CHANNEL MONITOR BUTTON  
 TRANSMIT TALK-AROUND (SIMPLEX) BUTTON  
 SQUELCH TAIL ELIMINATION  
 HIGH/LOW POWER SWITCH OR BUTTON  
 PER-CHANNEL POWER PROGRAMMING  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER, ADJUSTABLE  
 MEETS MIL810 SPECIFICATIONS FOR SHOCK, VIBRATION, DUST, AND RAIN

TRANSMITTER:

R.F. OUTPUT POWER: 5/4W.  
 FREQ. SPREAD, FULL SPECS.: 24/20  
 FREQ. STABILITY: +/- 2.5 PPM  
 SPURIOUS & HARMONICS: -66 DB.  
 FM HUM AND NOISE: -45 DB WB, -40 DB NB.  
 AUDIO DISTORTION: 5% @ 1 KHZ.  
 EMISSIONS: 11K0F3E, 16K0F3E

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.28 UV.  
 SELECTIVITY: -70 DB WB, -60 DB NB.  
 INTERMODULATION: -65 DB WB, -60 DB NB.  
 SPURIOUS & IMAGE REJECTION: -65 DB.  
 AUDIO POWER @ DISTORTION: 0.5 W. @ 10%  
 FREQ. SPREAD, FULL SPECS.: 24/20 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING,  
 STANDARD & HIGH CAPACITY BATTERIES,  
 DESK-TOP RAPID CHARGER,  
 SPEAKER/MICROPHONE,

II. AVAILABLE VENDOR OPTIONS:

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
 RG-58/U COAXIAL CABLE  
 PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
 N-MALE CONNECTOR FOR RG-58/U CABLE  
 BNC-MALE CONNECTOR FOR RG-58/U CABLE  
 HEAVY DUTY DUAL MUFF HEADSET WITH EAR CUP PTT, COIL CORD

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 CATEGORY 203- VHF HIGH BAND/UHF 128 CHANNEL 5/4W. PORTABLE RADIO

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CATEGORY 203- VHF HIGH BAND/UHF 128 CHANNEL 5/4W. PORTABLE RADIO

THIS CATEGORY IS FOR VHF/UHF, 5/4 WATT, 128 CHANNEL, ANALOG, PORTABLE RADIOS

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 150 - 174/450 - 470 MHZ.  
CHANNELS: 128  
CHANNEL SPACING: 12.5 AND 30 KHZ./ 12.5 AND 25 KHZ.  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE WITH P.C. AND DIRECT UNIT-TO-UNIT CLONING  
CTCSS AND DCSS CAPABILITY, ALL EIA TONES AND DIGITAL CODES  
SQUELCH TAIL ELIMINATION  
OPERATOR PROGRAMMABLE PRIORITY CTCSS AND DCSS SCAN  
RECEIVER CHANNEL MONITOR BUTTON  
TRANSMIT TALK-AROUND (SIMPLEX) BUTTON  
DTMF ENCODING PAD  
HIGH/LOW POWER SWITCH OR BUTTON  
PER-CHANNEL POWER PROGRAMMING  
BACK LIT LCD ALPHA-NUMERIC DISPLAY  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE  
DIE-CAST METAL CHASSIS  
MEETS MIL810 SPECIFICATIONS FOR SHOCK, VIBRATION, DUST AND RAIN

TRANSMITTER:

R.F. OUTPUT POWER: 5/4W.  
FREQ. SPREAD, FULL SPECS.: 24/20.  
FREQ. STABILITY: +/- 2.5 PPM  
SPURIOUS & HARMONICS: -70 DB.  
FM HUM AND NOISE: -45 DB WB, -40 DB NB.  
AUDIO DISTORTION: 5% @ 1 KHZ.  
EMISSIONS: 11K0F3E, 16K0F3E

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.28 UV.  
SELECTIVITY: -70 DB WB, -60 DB NB.  
INTERMODULATION: -65 DB WB, -60 DB NB.  
SPURIOUS & IMAGE REJECTION: -65 DB.  
AUDIO POWER @ DISTORTION: 0.5 W. @ 5%  
FREQ. SPREAD, FULL SPECS.: 24/20 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING,

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FACTORY PROGRAMMING,  
STANDARD & HIGH CAPACITY BATTERIES,  
DESK TOP RAPID CHARGER,  
SPEAKER/MICROPHONE,

## II. AVAILABLE VENDOR OPTIONS

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
RG-58/U COAXIAL CABLE  
PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
N-MALE CONNECTOR FOR RG-58/U CABLE  
BNC-MALE CONNECTOR FOR RG-58/U CABLE  
HEAVY DUTY DUAL MUFF HEADSET WITH EAR CUP PTT, COIL CORD

### ----- CATEGORY 204 VHF HIGH / UHF PORTABLE RADIO WITH MAN DOWN

THIS CATEGORY IS FOR VHF HIGH BAND AND UHF PORTABLE RADIOS WITH A MANUAL MAN DOWN BUTTON. THESE PORTABLE RADIOS ARE TO BE COMPATIBLE WITH EXISTING DEPARTMENT OF CORRECTION RADIOS HT750/HT1250 PORTABLE RADIO SYSTEMS.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW FEATURES AS STANDARD.

FREQUENCY BAND: 136-174 MHZ  
403-470 MHZ  
450-512 MHZ  
CHANNELS: MINIMUM OF 16  
CHANNEL SPACING : 12.5 AND 25 KHZ  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
MANUAL EMERGENCY FUNCTION (NO MERCURY OR OTHER AUTOMATIC ACTIVATION)  
SENSITIVITY (12 DB SINAD) EIA: .25 UV  
INTERMODULATION: 70 DB  
SPURIOUS REJECTION: 70 DB  
AUDIO RESPONSE (300 - 3000 HZ) : +1 TO -3DB

#### TRANSMITTER:

RF OUTPUT POWER: 5.0 WATTS VHF HIGH BAND  
4.0 WATTS UHF BAND  
FREQUENCY SPREAD: 136-170 MHZ VHF HIGH BAND  
403-470 MHZ  
450-512 MHZ  
FREQUENCY STABILITY: +/- 5 PPM @ 25 KHZ  
+/- 2.5 PPM @ 12.5 KHZ  
AUDIO DISTORTION: 3%

#### RECEIVER:

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RECEIVER:

SENSITIVITY: 12 DB SINAD EIA .25 UV  
20 DB SINAD ETS .50UV  
INTERMODULATION: 70 DB  
SPURIOUS REJECTION: 70 DB  
AUDIO DISTORTION: 3%

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING  
STANDARD AND HIGH CAPACITY NICKEL METAL HYDRIDE BATTERIES  
DESK TOP CHARGERS  
SPEAKER/MICROPHONES  
TEMPLE TRANSDUCER HEADSET  
PUBLIC SAFETY SHOULDER MICROPHONE  
BATTERY ANALYZER

II. AVAILABLE VENDOR OPTIONS

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
RG-58/U COAXIAL CABLE  
PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
N-MALE CONNECTOR FOR RG-58/U CABLE  
BNC-MALE CONNECTOR FOR RG-58/U CABLE

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CATEGORY 205 - VHF HIGH BAND/UHF 160 CHANNEL 5/4 WATT PORTABLE RADIO

THIS CATEGORY IS FOR VHF/UHF, 5/4 WATT, 160 CHANNEL, ANALOG, PORTABLE RADIO WITH DYNAMIC SCAN GROUPING TO BE COMPATIBLE WITH THE EXISTING TDOT KENWOOD TK290RADIO SYSTEMS.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 136 - 174 / 450 - 490 MHZ.  
CHANNELS: 160  
CHANNEL SPACING: 12.5 AND 30 KHZ. / 12.5 AND 25 KHZ.  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION MODE: ANALOG  
TEMPERATURE RANGE: - 30 TO + 60 DEG. C  
R.F. SYNTHESIZED  
RADIO PROGRAMMING USING PERSONAL COMPUTER  
DIRECT UNIT-TO-UNIT CLONING  
CTCSS AND DCSS CAPABILITY  
SQUELCH TAIL ELIMINATION  
NARROWBAND AND WIDEBAND OPERATION PROGRAMMABLE ON A PER CHANNEL BASIS  
  
PROGRAMMABLE CHANNEL SCAN WITH MIN. 30 DYNAMIC SCAN GROUPS, TALK-BACK SCAN, TWO PRIORITY CHANNELS, CHANNEL & GROUP ADD/DELETE, NUISANCE CHANNEL TEMPORARY DELETE



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# CHANNEL TEMPORARY DELETE

OPERATOR SELECTABLE CTCSS/DCSS TONES/CODES (MINIMUM OF 16)

PROGRAMMABLE FUNCTION KEYS - MINIMUM OF 5

TOP MOUNTED, LIGHTED, ALPHANUMERIC, 7 CHARACTER MIN., LCD CHANNEL DISPLAY, WITH OPERATOR ACTIVATED DISPLAY INVERT FEATURE AND PROGRAMMABLE MANUAL AND AUTOMATICALLY TIMED SHUTOFF AND DISABLE.

RECEIVER CHANNEL MONITOR BUTTON

TRANSMIT TALK-AROUND (SIMPLEX) BUTTON

MANUAL DTMF ENCODING WITH FRONT MOUNTED, INTEGRAL KEYPAD

PROGRAMMABLE AUTOMATIC DTMF ANI UPON PTT

PROGRAMMABLE AUTOMATIC DIGITAL ANI UPON PTT

SELECTIVE CALL DECODING WITH TWO-TONE AND DTMF FORMATS - DTMF SEL. CALL TO PROVIDE INDIVIDUAL AND GROUP CALLING AND OVER-THE-AIR RADIO DISABLE/ENABLE

PROGRAMMABLE KEY, SWITCH, OR BUTTON THAT WILL LOCK ALL OTHER BUTTONS AND DTMF ENCODE PAD.

HIGH/LOW TRANSMIT POWER VIA PROGRAMMABLE KEY, SWITCH, OR BUTTON

PER-CHANNEL POWER PROGRAMMING

TRANSMITTER VSWR PROTECTION

TRANSMIT TIME LIMITER, PROGRAMMABLE

## TRANSMITTER:

R.F. OUTPUT POWER: 5/4 W.

FREQ. SPREAD, FULL SPECS.: 38/40 MHZ

FREQ. STABILITY: +/- 2.5 PPM

SUPRIOUS & HARMONICS: - 70 DB.

FM HUM AND NOISE: - 40 DB. NB. / - 45 DB. WB.

AUDIO DISTORTION: LESS THAN 3%

MODULATION TYPES: 11K0F3E, 16K0F3E

## RECEIVER:

R.F. SENSITIVITY ( 12 DB. SINAD): 0.25 UV.

SELECTIVITY @ 12.5 KHZ.: - 70 / -68 DB.

@ 25.0 KHZ.: - 73 DB.

@ 30.0 KHZ.: - 75 DB.

INTERMODULATION: @ 12.5 KHZ.: - 68 / - 65 DB.

@ 25.0 KHZ.: - 73 DB.

@ 30.0 KHZ.: - 75 DB.

SPURIOUS & IMAGE REJECTION: - 75 / - 73 DB.

FREQUENCY STABILITY: +/- 2.5 PPM

AUDIO POWER @ DISTORTION: 0.5 W. @ 3%

FREQ. SPREAD, FULL SPECS.: 38/40 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

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I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING,  
STANDARD & HIGH CAPACITY BATTERIES (NICAD, NIMH)  
DESK-TOP RAPID CHARGER,  
MIL SPEC. NOISE CANCELING SPEAKER/MICROPHONE,  
VEHICULAR CHARGER/PA UNIT.

II. AVAILABLE VENDOR OPTIONS

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
RG-58/U COAXIAL CABLE  
PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
N-MALE CONNECTOR FOR RG-58/U CABLE  
BNC-MALE CONNECTOR FOR RG-58/U CABLE

-----  
CATEGORY 206- VHF HIGH BAND/UHF 255 CHANNEL 5/4W. SUBMERSIBLE P25  
DIGITAL PORTABLE RADIO

THIS CATEGORY IS FOR VHF/UHF, 5/4 WATT, 255 CHANNEL, P25 DIGITAL  
PORTABLE SUBMERSIBLE RADIO

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 136 - 174/450 - 470 MHZ.  
CHANNELS: 255  
ZONES: 32  
CHANNEL SPACING: 12.5/25 KHZ., 15/30 KHZ.  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG AND P25 DIGITAL, IMBE VOCODING  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
SUBMERSIBLE 1 METER DEPTH FOR 30 MIN.  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
CTCSS AND DCSS CAPABILITY  
SQUELCH TAIL ELIMINATION  
OPERATOR PROGRAMMABLE PRIORITY SCAN  
RECEIVER CHANNEL MONITOR BUTTON  
TRANSMIT TALK-AROUND (SIMPLEX) BUTTON  
ILLUMINATED DTMF ENCODING PAD  
SELECTIVE CALL DECODING  
AUTOMATIC ANI ENCODING  
HIGH//LOW POWER SWITCH OR BUTTON  
PER-CHANNEL POWER PROGRAMMING  
BACK LIT LCD ALPHA-NUMERIC DISPLAY  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE

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TRANSMITTER:

R.F. OUTPUT POWER: 5/4W.  
 FREQ. SPREAD, FULL SPECS.: 38/20  
 FREQ. STABILITY: +/- 2 PPM  
 SPURIOUS & HARMONICS: -70/-70 DB.  
 FM HUM AND NOISE: -45/-40 DB.  
 AUDIO DISTORTION: 3% @ 1 KHZ.  
 EMISSIONS: 11K0F3E, 16K0F3E  
 11K0F1D, 16K0F3D

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.25/0.32 UV.  
 SELECTIVITY @ 12.5 KHZ.: -70/-68 DB.  
 @ 25/30 KHZ.: -75/-73 DB.  
 @ DIGITAL: -60 DB  
 INTERMODULATION: -75/-75 DB  
 SPURIOUS & IMAGE REJECTION: -80/-75 DB.  
 AUDIO POWER @ DISTORTION: 0.5 W. @ 5%  
 FREQ. SPREAD, FULL SPECS.: 38/20 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING,  
 STANDARD & HIGH CAPACITY BATTERIES,  
 DESK-TOP RAPID CHARGER,  
 SPEAKER/MICROPHONE,  
 LEATHER SWIVEL CARRYING CASE WITH 3- INCH BELT LOOP

II. AVAILABLE VENDOR OPTIONS

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
 RG-58/U COAXIAL CABLE  
 PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
 N-MALE CONNECTOR FOR RG-58/U CABLE  
 BNC-MALE CONNECTOR FOR RG-58/U CABLE

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 CATEGORY 207- VHF HIGH BAND/UHF TRUNKED 512 CHANNEL 5W. PORTABLE RADIO

THIS CATEGORY IS FOR VHF/UHF, 5 WATT, 512 CHANNEL, ANALOG, PORTABLE  
 RADIOS COMPATIBLE WITH TN HOMELAND SECURITY DISTRICT 7 PASSPORT SYSTEM

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
 BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 136 - 174/400 - 470 MHZ.

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FREQUENCY BAND: 136 - 174/400 - 470 MHZ.  
 CHANNELS: 512  
 ZONES: 128  
 DUAL PRIORITY AND MULTI-ZONE SCAN WITH TALKBACK SCAN  
 CHANNEL SPACING: 12.5/15/25/30 KHZ. / 12.5/25 KHZ  
 MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
 EMISSION: ANALOG  
 TEMPERATURE RANGE: -30 TO +60 DEG. C.  
 R.F. SYNTHESIZED  
 P.C. PROGRAMMABLE WITH P.C. AND DIRECT UNIT-TO-UNIT CLONING  
 CTCSS AND DCSS CAPABILITY  
 SQUELCH TAIL ELIMINATION  
 OPERATOR PROGRAMMABLE PRIORITY CTCSS AND DCSS SCAN  
 RECEIVER CHANNEL MONITOR BUTTON  
 TRANSMIT TALK-AROUND (SIMPLEX) BUTTON  
 ILLUMINATED DTMF ENCODING PAD  
 SELECTIVE CALL DECODING WITH TWO-TONE/SIGNALLING  
 AUTOMATIC ANI ENCODING USING DTMF FORMAT  
 HIGH/LOW POWER SWITCH OR BUTTON  
 PER-CHANNEL POWER PROGRAMMING  
 BACK LIT LCD ALPHA-NUMERIC DISPLAY, MINIMUM 12 CHARACTER DISPLAY  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER, ADJUSTABLE

TRANSMITTER:

R.F. OUTPUT POWER: 5/5W.  
 FREQ. SPREAD, FULL SPECS.: 38/70  
 FREQ. STABILITY: +/- 5 PPM  
 SPURIOUS & HARMONICS: -70/-70 DB.  
 FM HUM AND NOISE: -40 DB. NB. /-45 DB. WB.  
 AUDIO DISTORTION: 3% @ 1 KHZ.  
 EMISSIONS: 11K0F3E, 16K0F3E

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.28 UV.  
 SELECTIVITY @ 12.5 KHZ.: -65/-63 DB.  
 @ 25/30 KHZ.: -70/-70 DB.  
 INTERMODULATION: @ 12.5 KHZ.: -70 DB.  
 @ 25/30 KHZ.: -70 DB.  
 SPURIOUS & IMAGE REJECTION: -73/-73 DB.  
 AUDIO POWER @ DISTORTION: 0.5 W. @ 3%  
 FREQ. SPREAD, FULL SPECS.: 38/70 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMING,  
 HIGH CAPACITY BATTERIES,  
 DESK-TOP RAPID CHARGER,  
 SPEAKER/MICROPHONE

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## II. AVAILABLE VENDOR OPTIONS:

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
 RG-58/U COAXIAL CABLE  
 PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
 N-MALE CONNECTOR FOR RG-58/U CABLE  
 BNC-MALE CONNECTOR FOR RG-58/U CABLE

-----  
 CATEGORY 208- VHF HIGH BAND/UHF 255 CHANNEL 5/4W. P25 DIGITAL PORTABLE RADIO

THIS CATEGORY IS FOR VHF/UHF, 5/4 WATT, 255 CHANNEL, P25 DIGITAL, PORTABLE RADIOS

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 150 - 174/450 - 470 MHZ.  
 CHANNELS: 255  
 CHANNEL SPACING: 12.5 AND 30 KHZ./ 12.5 AND 25 KHZ.  
 MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
 EMISSION: ANALOG AND P25 DIGITAL, IMBE VOCODING  
 TEMPERATURE RANGE: -30 TO +60 DEG. C.  
 R.F. SYNTHESIZED  
 P.C. PROGRAMMABLE  
 CTCSS AND DCSS CAPABILITY  
 SQUELCH TAIL ELIMINATION  
 OPERATOR PROGRAMMABLE PRIORITY SCAN  
 RECEIVER CHANNEL MONITOR BUTTON  
 TRANSMIT TALK-AROUND (SIMPLEX) BUTTON  
 HIGH/LOW POWER SWITCH OR BUTTON  
 PER-CHANNEL POWER PROGRAMMING  
 BACK LIT LCD ALPHA-NUMERIC DISPLAY, 11 CHARACTER MINIMUM  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER, ADJUSTABLE  
 MEETS MIL810 SPECIFICATIONS FOR SHOCK, VIBRATION, DUST, AND RAIN

### TRANSMITTER:

R.F. OUTPUT POWER: 5/4W.  
 FREQ. SPREAD, FULL SPECS.: 24/20  
 FREQ. STABILITY: +/- 2.5/2 PPM.  
 SPURIOUS & HARMONICS: -65/-70 DB.  
 FM HUM AND NOISE: -45 DB WB/-40 DB NB.  
 AUDIO DISTORTION: 2% @ 1 KHZ.

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AUDIO DISTORTION: 2% @ 1 KHZ.  
EMISSIONS: 11K0F3E, 16K0F3E  
8K10F1D, 20K0F1D

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.25/0.28 UV.  
SELECTIVITY: -75/-73 DB WB, -60/-60 DB NB.  
INTERMODULATION: -75/-73 DB.  
SPURIOUS & IMAGE REJECTION: -75/-73 DB.  
AUDIO POWER @ DISTORTION: 0.5 W. @ 3%  
FREQ. SPREAD, FULL SPECS.: 24/20 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING,  
STANDARD & HIGH CAPACITY BATTERIES,  
DESK-TOP RAPID CHARGER,  
SPEAKER/MICROPHONE,  
LEATHER SWIVEL CARRYING CASE WITH 3- INCH BELT LOOP

II. AVAILABLE VENDOR OPTIONS

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
RG-58/U COAXIAL CABLE  
PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
N-MALE CONNECTOR FOR RG-58/U CABLE  
BNC-MALE CONNECTOR FOR RG-58/U CABLE

-----  
CATEGORY 209- VHF HIGH BAND/UHF 512 CHANNEL 6/5W. ENCRYPTED PORTABLE  
RADIO

THIS CATEGORY IS FOR VHF/UHF, 6/5 WATT, 512 CHANNEL, APCO-25 DIGITAL,  
DES-OFB ENCRYPTED PORTABLE RADIOS FULLY COMPATIBLE WITH  
TENNESSEE BUREAU OF INVESTIGATION'S MOTOROLA XTS 5000 SYSTEM.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 136 - 174/380 - 470 MHZ.  
CHANNELS: 512  
CHANNEL SPACING: 12.5 AND 30 KHZ./ 12.5 AND 25 KHZ.  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG AND APCO 25 DIGITAL, IMBE VOCODING  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE WITH P.C.  
CTCSS AND DCSS CAPABILITY, ALL EIA TONES AND DIGITAL CODES

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CTCSS AND DCSS CAPABILITY, ALL EIA TONES AND DIGITAL CODES  
 SQUELCH TAIL ELIMINATION  
 OPERATOR PROGRAMMABLE PRIORITY CTCSS AND DCSS SCAN  
 OEM MULTI-KEY DES-OFB ENCRYPTION  
 HOME BUTTON TO RETURN TO SOFTWARE DEFINED DEFAULT CHANNEL  
 RECEIVER CHANNEL MONITOR BUTTON  
 TRANSMIT TALK-AROUND (SIMPLEX) BUTTON  
 ILLUMINATED DTMF ENCODING PAD  
 HIGH/LOW POWER SWITCH OR BUTTON  
 PER-CHANNEL POWER PROGRAMMING  
 BACK LIT LCD ALPHA-NUMERIC DISPLAY, 12 CHARACTER MINIMUM  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER, ADJUSTABLE

TRANSMITTER:

R.F. OUTPUT POWER: 6/5W.  
 FREQ. SPREAD: FULL BANDSPLIT.  
 FREQ. STABILITY: +/- 2.0 PPM.  
 SPURIOUS & HARMONICS: -75/-70 DBC.  
 FM HUM AND NOISE: -48/-45 DB WB, -42/-40 DB NB.  
 AUDIO DISTORTION: 1.5% @ 1 KHZ.  
 EMISSIONS: 11K0F3E, 16K0F3E  
 8K10F1D, 20K0F1D

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.20/0.25 UV.  
 SELECTIVITY: -80/-78 DB WB, -63/-60 DB NB.  
 INTERMODULATION: -78/-75 BB.  
 SPURIOUS & IMAGE REJECTION: -80 DB.  
 AUDIO POWER @ DISTORTION: 0.5 W. @ 1%  
 FREQ. SPREAD: FULL BANDSPLIT.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING,  
 STANDARD & HIGH CAPACITY BATTERIES,  
 DESK-TOP RAPID CHARGER,  
 SPEAKER/MICROPHONE,  
 LEATHER SWIVEL CARRYING CASE WITH 3- INCH BELT LOOP,  
 VEHICULAR CHARGER /CONSOLE, WITH SPEAKER, MICROPHONE, MOUNTING  
 HARDWARE, AND WIRING HARNESS

II. AVAILABLE VENDOR OPTIONS:

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
 RG-58/U COAXIAL CABLE  
 PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
 N-MALE CONNECTOR FOR RG-58/U CABLE  
 BNC-MALE CONNECTOR FOR RG-58/U CABLE

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BNC-MALE CONNECTOR FOR RG-58/U CABLE  
25 W. R.F. POWER AMPLIFIER

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CATEGORY 210- 800 MHZ., 48 CHANNEL 3W. CONVENTIONAL ANALOG PORTABLE RADIO

THIS CATEGORY IS FOR 800 MHZ. CONVENTIONAL, ANALOG, 3 WATT,  
48 CHANNEL, PORTABLE RADIOS

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 806 - 870 MHZ.  
CHANNELS: 48  
CHANNEL SPACING: 12.5 (NPSPAC) AND 25 KHZ.  
MODE OF OPERATION: SIMPLEX AND HALF DUPLEX  
EMISSION: ANALOG  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
CTCSS AND DCSS CAPABILITY, ALL EIA TONES AND DIGITAL CODES  
SQUELCH TAIL ELIMINATION  
OPERATOR PROGRAMMABLE PRIORITY CTCSS AND DCSS SCAN  
RECEIVER CHANNEL MONITOR BUTTON  
TRANSMIT TALK-AROUND (SIMPLEX) BUTTON  
HIGH/LOW POWER SWITCH OR BUTTON  
PER-CHANNEL POWER PROGRAMMING  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER, ADJUSTABLE  
MEETS MIL810 SPECIFICATIONS FOR SHOCK, VIBRATION, DUST, AND RAIN

TRANSMITTER:

R.F. OUTPUT POWER: 3W.  
FREQ. SPREAD, FULL SPECS.: 806 - 825/851-869 MHZ  
FREQ. STABILITY: +/- 1.5 PPM  
CONDUCTED SPURIOUS EMISSION: -75 DBC.  
FM HUM AND NOISE @ 25.0 KHZ.: -40 DB.  
AUDIO DISTORTION: 3% @ 1 KHZ.  
EMISSIONS: 11K0F3E, 16K0F3E

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.28 UV.  
SELECTIVITY @ 25.0 KHZ.: -72 DB.  
INTERMODULATION: -72 DB  
SPURIOUS & IMAGE REJECTION: -70 DB.  
AUDIO POWER @ DISTORTION: 0.5 W. @ 3%  
FREQ. SPREAD, FULL SPECS.: 851 - 870 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*



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\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING,  
STANDARD & HIGH CAPACITY BATTERIES,  
DESK-TOP RAPID CHARGER,  
SPEAKER/MICROPHONE,  
LEATHER SWIVEL CARRYING CASE WITH 3-INCH BELT LOOP,

II. AVAILABLE VENDOR OPTIONS:

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
RG-58/U COAXIAL CABLE  
PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
N-MALE CONNECTOR FOR RG-58/U CABLE  
BNC-MALE CONNECTOR FOR RG-58/U CABLE  
15 W. R.F. POWER AMPLIFIER.

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CATEGORY 211 255 CHANNEL 3 WATT PORTABLE TRUNKED RADIO

THIS CATEGORY IS FOR 700/800 MHZ CONVENTIONAL TRUNKED/2.5 WATT/3.0 WATT, 255 CHANNEL ANALOG / DIGITAL PORTABLE RADIOS TO BE COMPATIBLE WITH EXISTING DEPARTMENT OF CORRECTION RADIO SYSTEM. MOTOROLA XTS2500 TRUNKED PORTABLE RADIO.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW FEATURES AS STANDARD.

FREQUENCY BAND: 764-870 MHZ  
CHANNEL: 255  
CHANNEL SPACING : NPSPAC AND 25 KHZ  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
EMISSION: ANALOG OR DIGITAL  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
ILLUMINATED DISPLAY WITH ALPHA NUMERIC LETTERS  
TRANSMIT TALK AROUND (SIMPLEX) BUTTON  
EMERGENCY RESPONSE BUTTON, MAN DOWN.  
(NO MERCURY OR OTHER AUTOMATIC ACTIVATION)  
TRANSMITTER VSWR PROTECTION

TRANSMITTER:

RF OUTPUT POWER: 2.5 WATTS 700 MHZ  
3.0 WATTS 800 MHZ  
FREQUENCY SPREAD: FULL BAND 764-776/773-797/ AND 806-825/851-869 MHZ  
FREQUENCY STABILITY: +/- 0.00015 %  
EMISSIONS: -75 DBC  
AUDIO DISTORTION: 2%

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AUDIO DISTORTION: 2%

RECEIVER:

FREQUENCY SPREAD: 764-767/773-776/851-869 MHZ

SENSITIVITY: ANALOG 12 DB SINAD .25 UV  
DIGITAL 1% BER .40UV

INTERMODULATION: -74 DB

SPURIOUS REJECTION: -75 DB

AUDIO POWER AND DISTORTION: 0.5W @ 2.5%

HUM AND NOISE: 12.5 KHZ -40DB

25 KHZ -47DB

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING

STANDARD AND HIGH CAPACITY NICKEL METAL HYDRIDE BATTERIES

DESK TOP CHARGERS

SPEAKER/MICROPHONES

TEMPLE TRANSDUCER HEADSET

PUBLIC SAFETY SHOULDER MICROPHONE

BATTERY ANALYZER

II. AVAILABLE VENDOR OPTIONS

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA

RG-58/U COAXIAL CABLE

PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE

N-MALE CONNECTOR FOR RG-58/U CABLE

BNC-MALE CONNECTOR FOR RG-58/U CABLE

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CATEGORY 212- 700/800 MHZ TRUNKED ANALOG/DIGITAL PORTABLE RADIO 512 CHANNELS

THIS CATEGORY IS FOR 800 MHZ. TRUNKED, 2.5 WATT, 512 CHANNELS, ANALOG / P25 CAI DIGITAL PORTABLE RADIOS TO BE COMPATIBLE WITH EXISTING TEMA, DEPT OF SAFETY AND DEPT OF CORRECTION RADIO SYSTEMS MOTOROLA XTS2500 TRUNKED PORTABLE RADIOS.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 764 - 869 MHZ.

CHANNELS: 512

CHANNEL SPACING: NARROWBAND, NPSPAC AND 25 KHZ.

MODE OF OPERATION: SIMPLEX AND HALF DUPLEX

EMISSION: ANALOG, P25 DIGITAL

TEMPERATURE RANGE: -30 TO +60 DEG. C.

R.F. SYNTHESIZED

P.C. PROGRAMMABLE

IMBE VOCODER

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IMBE VOCODER  
 CTCSS AND DCSS CAPABILITY, ALL EIA TONES AND DIGITAL CODES  
 SQUELCH TAIL ELIMINATION  
 OPERATOR PROGRAMMABLE PRIORITY CTCSS AND DCSS SCAN  
 RECEIVER CHANNEL MONITOR BUTTON  
 TRANSMIT TALK-AROUND (SIMPLEX) BUTTON  
 ILLUMINATED DTMF ENCODING PAD  
 SELECTIVE CALL DECODING WITH TWO-TONE SIGNALLING  
 HIGH/LOW POWER SWITCH OR BUTTON  
 PER-CHANNEL POWER PROGRAMMING  
 BACK LIT LCD ALPHA-NUMERIC DISPLAY  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER, ADJUSTABLE  
 MDC 1200 SIGNALING

TRANSMITTER:

R.F. OUTPUT POWER: 2.5 W.  
 FREQ. SPREAD, FULL SPECS: 764-797, 803-824, 851-869 MHZ  
 FREQ. STABILITY: +/- 1.5 PPM  
 SPURIOUS EMISSION: -70 DBC.  
 FM HUM AND NOISE: -45 DB WB/ -40 DB NB.  
 AUDIO DISTORTION: 2% @ 1 KHZ.  
 EMISSIONS: 16K0F3E ANALOG VOICE, 16K0F1D P25 DIGITAL

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.25 UV WB/NB ANALOG  
 SELECTIVITY @ 25.0/12.5KHZ.: -72/-63 DB.  
 INTERMODULATION: -75 DB  
 SPURIOUS: -75 DBC.  
 AUDIO POWER @ DISTORTION: 0.5 W. / 2%  
 FREQ. SPREAD, FULL SPECS.: 764-767, 773-776, 851 - 869

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FACTORY PROGRAMMING,  
 STANDARD & HIGH CAPACITY BATTERIES,  
 DESK-TOP RAPID & CONDITIONING CHARGER,  
 SPEAKER/MICROPHONE,  
 LEATHER SWIVEL CARRYING CASE WITH 3-INCH BELT LOOP,  
 VEHICULAR CHARGER/CONSOLE WITH SPEAKER,  
 HEADSET MICROPHONE,  
 REPLACEMENT MODULES & ANTENNAS  
 TEST EQUIPMENT  
 MOUNTING HARDWARE, AND WIRING HARNESS

II. AVAILABLE VENDOR OPTIONS:

1/4 WAVELENGTH MAGNETIC-MOUNT MOBILE ANTENNA  
 RG-58/U COAXIAL CABLE

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RG-58/U COAXIAL CABLE  
 PL-259 CONNECTOR WITH REDUCER FOR RG-58/U CABLE  
 N-MALE CONNECTOR FOR RG-58/U CABLE  
 BNC-MALE CONNECTOR FOR RG-58/U CABLE  
 15 WATT R.F. POWER AMPLIFIER.

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 =====  
 CATEGORY: STATIONS/REPEATERS

CATEGORY 300 - HF 2 - 30 MHZ SSB BASE STATION

THIS CATEGORY IS FOR HIGH FREQUENCY SSB ANALOG BASE STATIONS

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
 BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 2 - 30 MHZ.  
 CHANNELS: 10  
 CHANNEL SPACING: 20 KHZ.  
 MODE OF OPERATION: SIMPLEX & HALF DUPLEX  
 EMISSION: ANALOG  
 R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
 TEMPERATURE RANGE: -30 TO +60 DEG. C.  
 A. C. POWER: 120 VAC, 60 HZ.  
 R.F. SYNTHESIZED  
 FRONT PANEL FREQUENCY PROGRAMMABLE  
 SQUELCH  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER, ADJUSTABLE  
 METERING FACILITY (INTERNAL OR WITH P.C. OR EXTERNAL TEST SET)  
 BUILT-IN RECEIVER SPEAKER  
 TEST MICROPHONE  
 MIL-STD-810C,D,E  
 CHANNEL SCAN

TRANSMITTER:

R.F. OUTPUT POWER: 125W PEP.  
 FREQ. SPREAD, FULL SPECS.: 28 MHZ.  
 FREQ. STABILITY: +/- 6PPM  
 INTERMODULATION: -31 DB PEP  
 SPURIOUS EMISSION: -64 DB PEP.  
 HARMONICS: -64 DB PEP.  
 CARRIER SUPPRESSION: -50 DB PEP  
 UNDESIREDB SIDEBAND SUPPRESSION: -55 DB PEP.  
 AUDIO DISTORTION: 3% @ 1 KHZ.  
 HUM & RIPPLE: -50 DB  
 INBAND NOISE: -60 DB (30 HZ BW)  
 EMISSIONS: J3E, R3E, H3E, J2A, J2B

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RECEIVER:

R.F. SENSITIVITY (10 DB. SINAD SSB): 0.50 UV.  
 SELECTIVITY @ 30.0 KHZ.: -60 DB @ -1 KHZ.  
 IMAGE REJECTION: -80 DB.  
 IF REJECTION: -85 DB.  
 UNDESIRE SIDE BAND REJECTION: -55 DB @ -1 KHZ.  
 CROSS MODULATION REJECTION: -100 DB @ 100KHZ.  
 DESENSSITIZATION: -100 DB @ 100KHZ.  
 INTERMODULATION: -80 DB.  
 SPURIOUS REJECTION: -80 DB.  
 RECIPROCAL MIXING: -100 DB @ 100KHZ  
 CLARIFIER RANGE: +/- 200 HZ IN 10 HZ STEPS  
 AUDIO DISTORTION: 3% MAX. @ 1 KHZ.  
 FREQ. SPREAD, FULL SPECS.: 8 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

AUTOMATIC LINK ESTABLISHMENT (ALE) FEDERAL STANDARD 1045 & MIL STD188  
 AUTOMATIC ANTENNA TUNER  
 HIGH STABILITY OSCILLATOR  
 FAX / DATA MODEM  
 1000W POWER AMPLIFIER  
 12V DC OPERATION  
 HF ANTENNAS

II. AVAILABLE VENDOR OPTIONS

1/2" CORRAGATED COPPER FEEDLINE  
 7/8" CORRAGATED COPPER FEEDLINE  
 N-FEMALE CONNECTOR FOR 1/2" CORRAGATED COPPER FEEDLINE  
 N-FEMALE CONNECTOR FOR 7/8" CORRAGATED COPPER FEEDLINE

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 CATEGORY 301- VHF LOW AND/OR HIGH BAND RADIO STATIONS

THIS CATEGORY IS FOR VHF LOW AND/OR HIGH BAND BASE AND REPEATER STATIONS. THE SLASH MARK (/) IN THIS DOCUMENT REFERS TO VHF LOW BAND ON THE LEFT SIDE AND VHF HIGH BAND ON THE RIGHT SIDE EXCEPT FOR +/- SPECIFICATIONS.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE COMPATIBLE WITH EXISTING DEPARTMENT OF SAFETY AND DEPARTMENT OF TRANSPORTATION RADIO NETWORKS DANIELS EQUIPMENT LINE  
 AND EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY RANGE: 38 - 50 MHZ./150 - 174 MHZ.  
 CHANNELS: 16

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CHANNELS: 16  
 CHANNEL SPACING: 20 AND 25 KHZ./12.5, 25 AND 30 KHZ.  
 MODE OF OPERATION: BASE (SIMPLEX), REPEATER (DUPLEX)  
 AVAILABLE CONFIGURATIONS: BASE STATION, REPEATER, CROSS-BAND REPEATER,  
 LINKED STATION, TWO RECEIVERS AND TWO TRANSMITTERS  
 FRONT PLUG-IN MODULAR CONSTRUCTION FOR RECEIVER, TRANSMITTER, AUDIO  
 CONTROL UNIT, MONITORING UNIT, POWER AMPLIFIER  
 CONSTRUCTION MUST NOT INCORPORATE MOBILE RADIO UNITS  
 TEMPERATURE RANGE: -30 TO +60 DEG. C.  
 OPERATING HUMIDITY: 95% AT 25 DEG. C.  
 INPUT POWER: 120/240 VAC, 60 HZ.  
 STANDARD E.I.A. 19-INCH RACK MOUNTABLE  
 CONTINUOUS DUTY OPERATION  
 R.F. SYNTHESIZED  
 PROGRAMMABLE  
 CTCSS/DCSS (DCSS IS OPTIONAL)  
 SQUELCH TAIL ELIMINATION  
 E&M CONTROL FUNCTIONS (AC-3E)  
 TONE REMOTE CONTROL  
 2-WIRE AND 4-WIRE LINE AUDIO, 600-OHM I/O  
 C.O.R. INTERFACE  
 TRANSMITTER VSWR PROTECTION (UP TO 2.5:1 VSWR)  
 TRANSMIT TIME LIMITER, ADJUSTABLE  
 DROP-OUT DELAY TIMER, ADJUSTABLE (IN REPEATER CONFIGURATION)  
 METERING FACILITY (INTERNAL OR WITH P.C. OR EXTERNAL TEST SET)  
 MONITOR SPEAKER  
 ANTENNA RELAY/BP-BR DUPLEXER  
 TEST MICROPHONE, STANDARD  
 ANTENNA CHANGE OVER RELAY/METER PANEL  
 ISO9002 QUALITY ASSURANCE  
 RECEIVER NOISE BLANKER ON VHF LOW BAND

#### TRANSMITTER:

R.F. OUTPUT POWER: 100/100 WATTS  
 FREQ. SPREAD, FULL SPECS.: +/- 2 MHZ./ +/- 2 MHZ.  
 FREQ. STABILITY: +/- 1 PPM  
 HARMONICS: -90 DBC.  
 SPURIOUS OUTPUT: -80/-90 DBC.  
 FM HUM AND NOISE: -45 DB.  
 AUDIO DISTORTION: 3% @ 1 KHZ.  
 EMISSIONS: FM ANALOG- 16KOF3E AND 11KOF3E

#### RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): -116/-118 DBM.  
 SELECTIVITY: @ 12.5 KHZ.: -85 DB.  
                   @ 25.0 KHZ.: -90 DB.  
                   @ 30.0 KHZ.: -90 DB.  
 INTERMODULATION: -85/-90 DB.  
 SPURIOUS RESPONSE: -95/-90 DB. (NB) AND -95 DB. (WB)  
 SQUELCH THRESHOLD: -123 TO -105 DBM.  
 SQUELCH HYSTERESIS: ADJUSTABLE FROM 2 TO 20 DB.  
 R.F. ATTACK/CLOSING TIME: <10MS.  
 AUDIO DISTORTION, THD: <2%

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AUDIO DISTORTION, THD: <2%  
FREQ. SPREAD, FULL SPECS.: +/- 0.5 MHZ./ +/- 2 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

#### I. AVAILABLE MANUFACTURER OPTIONS

AVAILABLE MANUFACTURER OPTIONS TO INCLUDE: UHF, 800 MHZ. RECEIVER AND TRANSMITTER MODULES AND DUPLEXERS, 20 - 30 WATT R.F. AMPLIFIER MODULE ON VHF HIGH BAND AND UHF, 100 WATT OUTPUT ON UHF, 90 WATT OUTPUT ON 800 AND 900 MHZ. BANDS, CTCSS ENCODER/DECODER, DCSS ENCODER/DECODER, AUX. CONNECTOR (TO ACCESS PTT, COR, RX AUDIO, TX AUDIO, DISC. AUDIO, MUTE, AND SUBTONE AUDIO I/P), INTERFACE CABLE FOR EXTERNAL RADIO CONTROL, SYSTEM MONITOR MODULES, SUBRACKS- VARIOUS COMBINATIONS, ALUMINUM PRESSURE-TESTED TRANSPORT CASE, DC CONVERTERS, PORTABLE RADIO PACKAGE, PORTABLE STATION CONTROL CARD, SERVICE CARDS AND CABLES, TERMINAL BLOCKS WITH ONE AND TWO 12-PIN BARRIER STRIPS, R.F. CABLES, PROGRAMMER, APPLICATION SUPPORT AND TRAINING COURSES,

#### AVAILABLE VENDOR OPTIONS:

1/2" CORRAGATED COPPER FEEDLINE  
7/8" CORRAGATED COPPER FEEDLINE  
N-FEMALE CONNECTOR FOR 1/2" CORRAGATED COPPER FEEDLINE  
N-FEMALE CONNECTOR FOR 7/8" CORRAGATED COPPER FEEDLINE

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#### CATEGORY 302 - VHF/UHF P25 REPEATER STATION

THIS CATEGORY IS FOR BOTH VHF HIGH-BAND AND UHF ANALOG & P25 REPEATER STATIONS FULLY COMPATABLE WITH THE EXISTING TEMA & TWRA P25 SYSTEM

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BANDS: 150 - 174/450 - 470 MHZ.  
CHANNELS: 1  
CHANNEL SPACING: 12.5 AND 30 KHZ. (VHF), 12.5 AND 25 KHZ. (UHF)  
MODE OF OPERATION: HALF AND FULL DUPLEX  
EMISSION: ANALOG & P25DIGITAL  
R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
A. C. POWER: 120 VAC, 60 HZ.  
PLUG-IN MODULAR CONSTRUCTION  
STANDARD E.I.A. 19-INCH RACK MOUNTABLE  
DC BACK-UP POWER WITH AUTO. SWITCH OVER, INTERNAL CHARGER AND ON-AIR ALARM  
CONTINUOUS DUTY  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
CTCSS AND DCSS, ALL EIA CTCSS AND DCSS CODES  
SQUELCH TAIL ELIMINATION

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SQUELCH TAIL ELIMINATION  
 TONE REMOTE CONTROL  
 2-WIRE OR 4-WIRE LINE AUDIO  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER AND TRANSMITTER DROP-OUT DELAY TIMER,  
 ADJUSTABLE  
 METERING FACILITY WITH P.C.  
 BUILT-IN RECEIVER SPEAKER  
 TEST MICROPHONE  
 AUTOMATIC C.W. IDENTIFIER WITH ADJUSTABLE TIMING  
 BAND PASS/BAND REJECT DUPLEXER

#### TRANSMITTER:

R.F. OUTPUT POWER: 100W.  
 FREQ. SPREAD, FULL SPECS.: 12/20 MHZ..  
 FREQ. STABILITY: +/- 1.0 PPM  
 SPURIOUS & HARMONICS: -90 DB.  
 FM HUM AND NOISE: -50 DB WB / 45 DB NB.  
 AUDIO DISTORTION: 2% @ 1 KHZ.  
 EMISSIONS: 11K0F3E, 16K0F3E, 16K0F1D, 10K0F1D

#### RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.25UV / 0.35 UV.  
 SELECTIVITY @ 12.5 KHZ.: -80/75 DB  
                   @ 25.0 KHZ.: -85/85 DB.  
                   @ 30.0 KHZ.: -90  
 INTERMODULATION: -85 DB.  
 SPURIOUS & IMAGE REJECTION: -100 DB.  
 LINE OUTPUT: -20 TO 0 DBM @ 1 KHZ.  
 AUDIO DISTORTION: 5% MAX. @ 1 KHZ.  
 FREQ. SPREAD, FULL SPECS.: 4 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

#### I. AVAILABLE MANUFACTURER OPTIONS:

INDOOR, FLOOR-MOUNT CABINET, 30-IN. HIGH (MAX.) WITH LOCKING REMOVABLE  
 DOOR(S)  
 19"EIA RACK  
 VOTING TONE ENCODER  
 BASE STATION ANTENNAS & MOUNTS  
 FEEDLINE, CONECTORS, LIGHTNING PROTECTION  
 TRANSMIT COMBINERS & MULTICOUPLERS

#### II. AVAILABLE VENDOR OPTIONS

1/2" CORRAGATED COPPER FEEDLINE  
 7/8" CORRAGATED COPPER FEEDLINE  
 N-FEMALE CONNECTOR FOR 1/2" CORRAGATED COPPER FEEDLINE  
 N-FEMALE CONNECTOR FOR 7/8" CORRAGATED COPPER FEEDLINE



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CATEGORY 303 - VHF/UHF REPEATER STATION, W/ ENCRYPTION

THIS CATEGORY IS FOR BOTH VHF HIGH-BAND AND UHF ANALOG REPEATER STATIONS FULLY COMPATABLE WITH MOTOROLA SECURENET FOR EXISTING TBI SYSTEM

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BANDS: 150 - 174/450 - 470 MHZ.  
CHANNELS: 1  
CHANNEL SPACING: 12.5 AND 30 KHZ. (VHF), 12.5 AND 25 KHZ. (UHF)  
MODE OF OPERATION: HALF AND FULL DUPLEX  
EMISSION: ANALOG & P25 DIGITAL  
R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
A. C. POWER: 120 VAC, 60 HZ.  
PLUG-IN MODULAR CONSTRUCTION  
STANDARD E.I.A. 19-INCH RACK MOUNTABLE  
DC BACK-UP POWER WITH AUTO. SWITCH OVER, INTERNAL CHARGER AND  
ON-AIR ALARM  
CONTINUOUS DUTY  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
CTCSS AND DCSS, ALL EIA CTCSS AND DCSS CODES  
SQUELCH TAIL ELIMINATION  
TONE REMOTE CONTROL  
2-WIRE OR 4-WIRE LINE AUDIO  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER AND TRANSMITTER DROP-OUT DELAY TIMER,  
ADJUSTABLE  
METERING FACILITY WITH P.C.  
BUILT-IN RECEIVER SPEAKER  
TEST MICROPHONE  
AUTOMATIC C.W. IDENTIFIER WITH ADJUSTABLE LEVEL AND TIMING  
BAND PASS/BAND REJECT DUPLEXER

TRANSMITTER:

R.F. OUTPUT POWER: 100W.  
FREQ. SPREAD, FULL SPECS.: 12/20 MHZ..  
FREQ. STABILITY: +/- 1.0 PPM  
SPURIOUS & HARMONICS: -90 DB.  
FM HUM AND NOISE: -50 DB WB / 45 DB NB.  
AUDIO DISTORTION: 2% @ 1 KHZ.  
EMISSIONS: 11K0F3E, 16K0F3E, 16K0F1D, 10K0F1D

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.25UV / 0.35 UV.  
SELECTIVITY @ 12.5 KHZ.: -80/75 DB

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SELECTIVITY @ 12.5 KHZ.: -80/75 DB  
@ 25.0 KHZ.: -85/85 DB.  
@ 30.0 KHZ.: -90

INTERMODULATION: -85 DB.  
SPURIOUS & IMAGE REJECTION: -100 DB.  
LINE OUTPUT: -20 TO 0 DBM @ 1 KHZ.  
AUDIO DISTORTION: 5% MAX. @ 1 KHZ.  
FREQ. SPREAD, FULL SPECS.: 4 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

INDOOR, FLOOR-MOUNT CABINET, 30-IN. HIGH (MAX.) WITH LOCKING REMOVABLE DOOR(S)  
19" EIA RACK  
VOTING TONE ENCODER  
ENCRYPTION DES / AES  
BASE STATION ANTENNAS & MOUNTS  
FEEDLINE & CONNECTORS

II. AVAILABLE VENDOR OPTIONS

1/2" CORRAGATED COPPER FEEDLINE  
7/8" CORRAGATED COPPER FEEDLINE  
N-FEMALE CONNECTOR FOR 1/2" CORRAGATED COPPER FEEDLINE  
N-FEMALE CONNECTOR FOR 7/8" CORRAGATED COPPER FEEDLINE

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CATEGORY 304- VHF HIGHBAND/UHF/800 MHZ. REPEATER

THIS CATEGORY IS FOR VHF HIGH-BAND, UHF, AND 800 MHZ. ANALOG REPEATER STATIONS.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

FREQUENCY BAND: 150 - 174/450 - 470/806 - 870 MHZ.  
CHANNELS: 1  
CHANNEL SPACING: 12.5 AND 30 KHZ.(VHF),12.5 AND 25 KHZ. (UHF/800 MHZ.)  
MODE OF OPERATION: DUPLEX  
EMISSION: ANALOG  
R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
A. C. POWER: 120 VAC, 60 HZ.  
STANDARD E.I.A. 19-INCH RACK MOUNTABLE  
12 VDC. BACK-UP POWER WITH AUTO. SWITCH OVER, CHARGER AND ON-AIR ALARM  
CONTINUOUS DUTY  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
CTCSS AND DCSS, ALL EIA TONES AND DIGITAL CODES

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CTCSS AND DCSS, ALL EIA TONES AND DIGITAL CODES  
 SQUELCH TAIL ELIMINATION  
 TONE REMOTE CONTROL  
 2-WIRE OR 4-WIRE LINE AUDIO  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER, ADJUSTABLE  
 METERING FACILITY WITH P.C.  
 TEST MICROPHONE OR HANDSET  
 AUTOMATIC C.W. IDENTIFIER WITH ADJUSTABLE TIMING AND LEVEL  
 ADJUSTABLE 0 - 8 SECOND TRANSMIT DROPOUT TIMER

TRANSMITTER:

R.F. OUTPUT POWER: 100/100/75W.  
 FREQ. SPREAD, FULL SPECS.: 2/2/0.5 MHZ.  
 FREQ. STABILITY: +/- 1.5 PPM  
 SPURIOUS & HARMONICS: -85/-85/-80 DB.  
 FM HUM AND NOISE: -50 DB WB / -45 DB NB.  
 AUDIO DISTORTION: 3% @ 1 KHZ.  
 EMISSIONS: 11K0F3E, 16K0F3E

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.35  
 SELECTIVITY.: -80/-80/-80 DB WB, -75/-75/-70 DB NB.  
 INTERMODULATION: -80 DB WB, -75 DB NB.  
 SPURIOUS & IMAGE REJECTION: -85/-85/-90 DB.  
 LINE OUTPUT: -20 TO 0 DBM @ 1 KHZ.  
 AUDIO DISTORTION: 3% MAX. @ 1 KHZ.  
 FREQ. SPREAD, FULL SPECS.: 2/2/0.5 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

INDOOR, FLOOR-MOUNT CABINET, WITH LOCKING REMOVABLE  
 DOOR(S)  
 BAND PASS - BAND REJECT RF DUPLEXER

II. AVAILABLE VENDOR OPTIONS

RECEIVER R.F. PRE-SELECTOR  
 1/2" CORRAGATED COPPER FEEDLINE  
 7/8" CORRAGATED COPPER FEEDLINE  
 N-FEMALE CONNECTOR FOR 1/2" CORRAGATED COPPER FEEDLINE  
 N-FEMALE CONNECTOR FOR 7/8" CORRAGATED COPPER FEEDLINE

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 CATEGORY 305 - 700 MHZ. DIGITAL REPEATER STATION

THIS CATEGORY IS FOR 700 MHZ. DIGITAL, REPEATER STATIONS CAPABLE OF

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THIS CATEGORY IS FOR 700 MHZ. DIGITAL, REPEATER STATIONS CAPABLE OF EITHER VOICE OR DATA.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES:

FREQUENCY BAND: 764 - 806 MHZ.  
CHANNELS: 1  
CHANNEL SPACING: 25 KHZ. AND 12.5 KHZ  
MODE OF OPERATION: HALF AND FULL DUPLEX  
EMISSION: DIGITAL P25  
R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
PLUG-IN MODULAR CONSTRUCTION  
STANDARD E.I.A. 19-INCH RACK MOUNTABLE  
DC. BACK-UP POWER WITH AUTO. SWITCH OVER, INTERNAL CHARGER AND ALARM  
CONTINUOUS DUTY  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
STATION ACCESS CODE  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER AND TRANSMITTER DROP-OUT DELAY TIMER, ADJUSTABLE  
METERING FACILITY (INTERNAL OR WITH P.C. OR TEST SET)  
AUTOMATIC C.W. IDENTIFIER WITH ADJUSTABLE LEVEL AND TIMING  
BAND PASS/BAND REJECT DUPLEXER  
RECEIVER MULTI-COUPLER  
TRANSMIT COMBINER

#### TRANSMITTER:

R.F. OUTPUT POWER: 40W.  
FREQ. SPREAD, FULL SPECS.: 764 - 776 MHZ.  
FREQ. STABILITY: +/- 1.0 PPM  
SPURIOUS & HARMONICS: -80 DB.  
AUDIO DISTORTION: 2% @ 1 KHZ.  
EMISSIONS: 8K70F1E, 8K70D1W

#### RECEIVER:

R.F. SENSITIVITY (BER 5%): -121 DBM  
INTERMODULATION: -80 DB.  
SPURIOUS & IMAGE REJECTION: -85 DB.  
ADJACENT CHANNEL REJECTION: -60 DB  
FREQ. SPREAD, FULL SPECS.: 794 - 806 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

#### I. AVAILABLE MANUFACTURER OPTIONS:

INDOOR, OUTDOOR CABINET, WITH LOCKING REMOVABLE DOOR(S)  
19" EIA STANDARD RACKS  
BASE STATIONS ANTENNAS, FEEDLINE, CONNECTORS AND LIGHTNING PROTECTION

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BASE STATIONS ANTENNAS, FEEDLINE, CONNECTORS AND LIGHTNING PROTECTION  
& SITE GROUNDING DEVICES  
CROSS BANDING DEVICES  
REPLACEMENT MODULES  
TEST EQUIPMENT

## II. AVAILABLE VENDOR OPTIONS

1/2" CORRAGATED COPPER FEEDLINE  
7/8" CORRAGATED COPPER FEEDLINE  
N-FEMALE CONNECTOR FOR 1/2" CORRAGATED COPPER FEEDLINE  
N-FEMALE CONNECTOR FOR 7/8" CORRAGATED COPPER FEEDLINE

### ----- CATEGORY 306 - 800 MHZ. TRUNKED REPEATER STATION

THIS CATEGORY IS FOR 800 MHZ. TRUNKED, ANALOG/DIGITAL, REPEATER STATIONS, FULL COMPATABLE WITH EXISTING MOTOROLA TRUNKING SYSTEMS USED BY TN DEPT. OF CORRECTION, TEMA AND DEPT OF SAFETY MOTOROLA QUANTAR REPEATERS.  
ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES:

FREQUENCY BAND: 806 - 869 MHZ.  
CHANNELS: 1  
CHANNEL SPACING: 25 KHZ. AND NPSPAC  
MODE OF OPERATION: HALF AND FULL DUPLEX  
EMISSION: ANALOG  
R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
TEMPERATURE RANGE: -30 TO +60 DEG. C.  
A. C. POWER: 120 VAC, 60 HZ.  
PLUG-IN MODULAR CONSTRUCTION  
STANDARD E.I.A. 19-INCH RACK MOUNTABLE  
DC. BACK-UP POWER WITH AUTO. SWITCH OVER, INTERNAL CHARGER AND ALARM

CONTINUOUS DUTY  
R.F. SYNTHESIZED  
P.C. PROGRAMMABLE  
CTCSS AND DCSS  
SQUELCH TAIL ELIMINATION  
TONE REMOTE CONTROL  
2-WIRE OR 4-WIRE LINE AUDIO  
TRANSMITTER VSWR PROTECTION  
TRANSMIT TIME LIMITER AND TRANSMITTER DROP-OUT DELAY TIMER, ADJUSTABLE  
METERING FACILITY (INTERNAL OR WITH P.C. OR TEST SET)  
BUILT-IN RECEIVER SPEAKER  
TEST MICROPHONE  
AUTOMATIC C.W. IDENTIFIER WITH ADJUSTABLE LEVEL AND TIMING  
BAND PASS/BAND REJECT DUPLEXER

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BAND PASS/BAND REJECT DUPLEXER  
RECEIVER MULTI-COUPLER  
TRANSMIT COMBINER

TRANSMITTER:

R.F. OUTPUT POWER: 100W.  
FREQ. SPREAD, FULL SPECS.: 851 - 869 MHZ.  
FREQ. STABILITY: +/- 1.0 PPM  
SPURIOUS & HARMONICS: -80 DB.  
FM HUM AND NOISE: -45 DB WB.  
AUDIO DISTORTION: 2% @ 1 KHZ.  
EMISSIONS: 16K0F3E, 16K0F1D, 20K0F1E

RECEIVER:

R.F. SENSITIVITY (12 DB. SINAD): 0.30 UV.  
SELECTIVITY @ 12.5.0 KHZ.: -70 DB.  
@ 25.0 KHZ.: -80 DB.  
INTERMODULATION: -85 DB.  
SPURIOUS & IMAGE REJECTION: -100 DB.  
LINE OUTPUT: -20 TO 0 DBM @ 1 KHZ.  
AUDIO DISTORTION: 5% MAX. @ 1 KHZ.  
FREQ. SPREAD, FULL SPECS.: 806 - 825 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

INDOOR, FLOOR-MOUNT CABINET, 30-IN. HIGH (MAX.) WITH LOCKING  
REMOVABLE DOOR(S)  
19" EIA STANDARD RACKS  
BASE STATIONS ANTENNAS, FEEDLINE, CONNECTORS AND LIGHTNING PROTECTION  
REPLACEMENT MODULES

II. AVAILABLE VENDOR OPTIONS

1/2" CORRAGATED COPPER FEEDLINE  
7/8" CORRAGATED COPPER FEEDLINE  
N-FEMALE CONNECTOR FOR 1/2" CORRAGATED COPPER FEEDLINE  
N-FEMALE CONNECTOR FOR 7/8" CORRAGATED COPPER FEEDLINE

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CATEGORY 307 - 800 MHZ. DATA BASE STATION

THIS CATEGORY IS FOR 800 MHZ., ANALOG, RD-LAP 19.2 DATA BASE STATIONS  
COMPATIBLE WITH EXISTING DEPARTMENT OF SAFETY DATA NETWORK  
MOTOROLA QUANTAR REPEATERS.  
ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
BELOW LISTED FEATURES AS STANDARD:

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FREQUENCY BAND: 806 - 869 MHZ.  
 CHANNELS: 1; SYNTHESIZED  
 CHANNEL SPACING: 25 KHZ.  
 MODE OF OPERATION: HALF AND FULL DUPLEX  
 EMISSION: RD-LAP 19.2, +/- 5.6 KHZ.  
 R.F. IMPEDANCE, RECEIVER & TRANSMITTER: 50 OHMS  
 TEMPERATURE RANGE: -30 TO +60 DEG. C.  
 A. C. POWER: 120 VAC, 60 HZ.  
 PLUG-IN MODULAR CONSTRUCTION  
 STANDARD E.I.A. 19-INCH RACK MOUNTABLE  
 DC. BACK-UP POWER WITH AUTO. SWITCH OVER, INTERNAL CHARGER AND ALARM  
 CONTINUOUS DUTY  
 R.F. SYNTHESIZED  
 P.C. PROGRAMMABLE  
 CTCSS AND DCSS  
 SQUELCH TAIL ELIMINATION  
 TONE REMOTE CONTROL  
 2-WIRE OR 4-WIRE LINE AUDIO  
 TRANSMITTER VSWR PROTECTION  
 TRANSMIT TIME LIMITER AND TRANSMITTER DROP-OUT DELAY TIMER,  
 ADJUSTABLE  
 METERING FACILITY (INTERNAL OR WITH P.C. OR TEST SET)  
 BUILT-IN RECEIVER SPEAKER  
 TEST MICROPHONE  
 AUTOMATIC C.W. IDENTIFIER WITH ADJUSTABLE LEVEL AND TIMING  
 BAND PASS/BAND REJECT DUPLEXER

TRANSMITTER:

R.F. OUTPUT POWER: 100 / 25W.  
 FREQ. SPREAD, FULL SPECS.: 851 - 869 MHZ.  
 FREQ. STABILITY: +/- 1.5 PPM  
 SPURIOUS & HARMONICS: -36 DBM.  
 FM HUM AND NOISE: -45 DB.  
 AUDIO DISTORTION: 3% @ 1 KHZ.  
 EMISSIONS: 20K0F10

RECEIVER

R.F. SENSITIVITY (12 DB. SINAD): 0.30 UV.  
 SELECTIVITY @ 12.5 KHZ.: -70 DB.  
 @ 25.0 KHZ.: -70 DB.  
 INTERMODULATION: -85 DB.  
 SPURIOUS & IMAGE REJECTION: -100 DB.  
 LINE OUTPUT: -20 TO 0 DBM @ 1 KHZ.  
 AUDIO DISTORTION: 5% MAX. @ 1 KHZ.  
 FREQ. SPREAD, FULL SPECS.: 806 - 824 MHZ.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

INDOOR, FLOOR-MOUNT CABINET, 30-IN. HIGH (MAX.) WITH LOCKING

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INDOOR, FLOOR-MOUNT CABINET, 30-IN. HIGH (MAX.) WITH LOCKING  
 REMOVABLE DOOR(S)  
 DATA TRANSMITER  
 DATA RECEIVER  
 OTHER MANUFACTURER OPTIONS NOT LISTED  
 AVAILABLE VENDOR OPTIONS:  
 BAND PASS/BAND REJECT DUPLEXER  
 RECEIVER MULTI-COUPLER  
 TRANSMIT COMBINER  
 RADIO NODE CONTROLLER  
 800MHZ ANTENNAS AND MOUNTS  
 FEEDLINE, CONNECTORS  
 RADIO MODEM  
 REPLACEMENT MODULES  
 LIGHTNING AND GROUND DEVICES

II. AVAILABLE VENDOR OPTIONS:

1/2" CORRAGATED COPPER FEEDLINE  
 7/8" CORRAGATED COPPER FEEDLINE  
 N-FEMALE CONNECTOR FOR 1/2" CORRAGATED COPPER FEEDLINE  
 N-FEMALE CONNECTOR FOR 7/8" CORRAGATED COPPER FEEDLINE

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 CATEGORY 400- 4.9 GHZ., DIGITAL, 1XT1 CAPACITY, MICROWAVE STATIONS

THIS CATEGORY IS FOR DIGITAL MICROWAVE STATIONS OPERATING IN THE  
 4.9 GHZ. PUBLIC SAFETY MICROWAVE BAND FOR POINT-TO-POINT  
 TRANSMISSION FOR VOICE AND DIGITAL DATA.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE  
 BELOW LISTED FEATURES AS STANDARD:

R.F FREQUENCY BAND: 4.940 - 4.990 GHZ.  
 CAPACITY: 1XT1 - 4XT1  
 DIGITAL LINE INTERFACE RATE FOR DS1: 1.544 MBPS  
 MODULATION TYPE: 16QAM  
 FORWARD ERROR CORRECTION  
 SYSTEM GAIN: 20 DBI  
 STATUS AND SYSTEM ALARMS: LED AND ALARM RELAYS WITH NETWORK MANAGEMENT  
 LINK AND STATUS CONTROL  
 FCC PART 90 COMPLIANT

VOLTAGE REQUIREMENTS: 9 - 18VDC OR 18 TO 75 VDC, 30W MAX  
 OPERATING TEMPERATURE RANGE: -40 TO +70 DEG. C. AT 100% HUMIDITY

MOUNTING: STANDARD 19-INCH E.I.A. OR DIRECT TO TOWER WITH NEMA WEATHER  
 PROOF HOUSING

TRANSMITTER:



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R.F. OUTPUT POWER: UP TO +20 DBM

RECEIVER:

RECEIVE LEVEL: -30DBM ERROR FREE (+10DBM WITHOUT DAMAGE)

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:  
REPLACEMENT MODULES  
EXTERNAL ANTENNA CONNECTION

II. AVAILABLE VENDOR OPTIONS:

MICROWAVE ANTENNAS  
TEST EQUIPMENT  
MULTIPLEXER CHANNEL BANK  
MULTIPLEXER VOICE & DATA CARDS

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CATEGORY 401- DIGITAL, 8DS1/OC-3 CAPACITY, MICROWAVE STATIONS

THIS CATEGORY IS FOR HIGH CAPACITY, DIGITAL MICROWAVE STATIONS AND ASSOCIATED EQUIPMENT TO BE COMPATIBLE WITH EXISTING TDOS (8DS1) AND TDOT (OC-3) HARRIS TRUEPOINT PRODUCT LINE WITH STARVIEW NETWORK MANAGEMENT AND HARRIS INTRAPLEX MUXES.

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

R.F FREQUENCY BAND: 6/10.5/11/18/23 GHZ COMMON PLATFORM  
MODE OF OPERATION - R.F. SYNTHESIZED OR CRYSTAL OSCILLATORS  
DATA CAPACITY: 8DS1 - OC-3  
DIGITAL LINE RATE FOR DS1: 1.544 MBPS  
MODULATION TYPE: 4QAM - 128QAM SOFTWARE PROGRAMMABLE  
R.F EMISSION TYPE: PER FCC PART 101 RULES  
CHANNEL BANDWIDTH: PER FCC PART 101 RULES.

MINIMUM SYSTEM GAIN: MEASURED @ 10-6BER THRESHOLD GUARANTEED  
(REFERENCED TO A NON-PROTECTED CONFIGURATION AT 25DEG C)  
6GHZ: 8DS1=108DB/OC3=93DB  
10/11GHZ: 8DS1=104DB/OC3=89DB  
18GHZ: 8DS1=106DB/OC3=91.5DB

DISPERSIVE FADE MARGIN (DFM): 8DS1=68 DB/ OC3=50DB @ 10E-3 BIT ERROR RATE (BER)

RECEIVER THRESHOLD

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# RECEIVER THRESHOLD

PATH PROTECTION: 1 X 1 HOT STANDBY  
AUTOMATIC POWER CONTROL: 10 DB.

SERVICE CHANNEL: ONE AUDIO CHANNEL (300 - 3,400 HZ.) AND ONE RS-232,  
19.2 Kbps, ASYNCH. DATA CHANNEL

STATUS AND SYSTEM ALARMS  
EXTERNAL ALARMS: 2-TTL  
EXTERNAL CONTROLS: 4- FORM C DRY CONTACTS

MAIN A.C. INPUT TO POWER SUPPLY: 120 VAC, 60 HZ. NOMINAL,  
SINGLE PHASE. SIZED FOR EQUIPMENT INCLUDING APPLICABLE FUSES/BREAKERS.

EQUIPMENT D.C. VOLTAGE REQUIREMENTS: +/- 24 OR +/- 48 VDC.  
OPERATING TEMPERATURE RANGE: +5 TO +50 DEG. C. AT 95% HUMIDITY

CONSTRUCTION: PLUG-IN MODULAR WITH 100% FRONT PANEL  
ACCESSIBILITY AND L.E.D. FAILURE INDICATORS

MOUNTING: STANDARD 19-INCH E.I.A.

WAVEGUIDE FLANGE:  
6GHZ: CPR137G  
10/11GHZ: CPR90G  
18GHZ: UG596A/U

## TRANSMITTER:

R.F. OUTPUT POWER: MINIMUM TRANSMIT POWER GUARANTEED (REFERENCED TO  
A NON-PROTECTED CONFIGURATION)  
CARRIER STABILITY: 0.001%

6GHZ: 8DS1=24.5DBM / OC3=22.5DBM MINIMUM  
10/11GHZ: 8DS1=23DBM / OC3=19DBM MINIMUM  
18GHZ: 8DS1=24DBM / OC3=19DBM MINIMUM

RECEIVER:  
BIT ERROR RATE (BER): MINIMUM RECEIVER THRESHOLD @10-6BER GUARANTEED  
STABILITY: 0.001%

6GHZ: 8DS1=-83.5DBM / OC3=-70.5DBM MINIMUM  
10/11GHZ: 8DS1=-82DBM / OC3=-74DBM MINIMUM  
18GHZ: 8DS1=-87DBM / OC3=-72.5DBM MINIMUM

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:  
ALTERNATE FREQUENCY BAND/BANDWIDTH RADIOS WITHIN THE SAME PRODUCT  
FAMILY PER FCC LICENSING REGULATIONS  
INTEGRAL ORDERWIRE MODULE WITH DTMF SIGNALING,  
DELETE INDIVIDUAL VF CHANNEL MODULES,  
DELETE HOT STANDBY,

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DELETE HOT STANDBY,  
ADD SPACE DIVERSITY

II. AVAILABLE VENDOR OPTIONS: ANTENNAS: EQUAL TO ANDREW MODELS HP6-65F, HP8-65E, HP10-65E, HP12-65E, PAR6-65A, PAR8-65A, PAR10 PAR12-65A PLUS RADOMES, WAVEGUIDE: EQUAL TO ANDREW MODEL EW63 PLUS ALL CONNECTORS AND ACCESSORIES FOR SAME. MULTIPLEXER CHANNEL BANK, MULIPLEXER VOICE AND DATA CARDS. OTHER VENDOR OPTIONS NOT LISTED.

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CATEGORY 402- 5.8 GHZ., T -1 CAPABLE SPREAD SPECTRUM RADIO

THIS CATEGORY IS FOR A T-1 CAPABLE, POINT-TO-POINT, LICENSE FREE, SPREAD SPECTRUM, RADIO STATIONS OPERATING IN THE 5.8 GHZ BAND FOR DATA, AND VOICE TRANSMISSION. EQUIPMENT SHALL BE READY-TO-INSTALL AND AVAILABLE "OFF THE SHELF".

ALL RADIO UNITS PROVIDED UNDER CONTRACT SHALL BE EQUIPPED WITH THE BELOW LISTED FEATURES AS STANDARD:

CONNECTIVITY RANGE: UP TO 25 KM. OR MORE  
FREQUENCY BANDS: 5.8 GHZ. ISM BAND  
R.F. CHANNELS: 2 OR MORE  
SEPARATE MAINTENANCE CHANNEL  
MODE OF OPERATION: R.F. SYNTHESIZED OR CRYSTAL OSCILLATORS  
R.F EMISSION AND TECHNIQUE: SPECTRUM WITH DIGITAL MODULATION  
DATA RATE: 1 T-1 1.544 MBPS SYNCHRONOUS  
PROGRAMMABLE PARAMETERS: CHANNEL  
COMMAND INTERFACE: RS232 VIA DB25 CONNECTOR  
NETWORK MANAGEMENT: SNMP CAPABLE  
FAILURE ALARMS  
DIAGNOSTICS: BUILT-IN. INCLUDES RECEIVE SIGNAL STRENGTH, BER CHECKING, LOOPBACK

GENERAL:  
TEMPERATURE RANGE: -30 TO +60 DEG. CELCIUS  
MAXIMUM HUMIDITY: 95% NON-CONDENSING  
MAIN A.C. INPUT TO POWER SUPPLY: 120 VAC, 60 HZ. NOMINAL, SINGLE PHASE  
CERTIFICATION: FCC TYPE ACCEPTED  
ANTENNA PORT: N FEMALE  
ANTENNA IMPEDANCE: 50 OHMS  
DIGITAL INTERFACE: DSX-1  
CONNECTION: RJ48-C  
HEIGHT: ONE RACK UNIT

TRANSMITTER:  
TRANSMIT BANDWIDTH: 15MHZ  
TRANSMIT POWER OUTPUT LEVEL: +20 DBM. MAXIMUN  
CARRIER STABILITY: MEETS FCC PART 15  
SPURIOUS OUTPUT: MEETS FCC PART 15

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SPURIOUS OUTPUT: MEETS FCC PART 15

RECEIVER:

SENSITIVITY: BIT ERROR RATE (BER):  $10 \text{ EE-6 @ -95 DBM}$ .

RECEIVE BANDWIDTH: 15MHZ

LOCAL OSC. STABILITY: MEETS FCC PART 15.

\*\*\*\*\*OPTIONAL MANUFACTURER'S AND VENDOR'S ITEMS/PRODUCTS\*\*\*\*\*

I. AVAILABLE MANUFACTURER OPTIONS:

FAMILY PER FCC LICENSING REGULATIONS

INTEGRAL ORDERWIRE MODULE WITH DTMF SIGNALING,

DELETE INDIVIDUAL VF CHANNEL MODULES,

DELETE HOT STANDBY.

II. AVAILABLE VENDOR OPTIONS:

DIGITAL MUX / CHANNEL BANK: WITH VOICE AND DATA CAPABILITIES.

OUTSIDE ANTENNA - 1 FT, 2FT AND 3FT DISH

VOIP MUX WITH VOICE CHANNEL CAPABILITY

TRAINING

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PRICE SHEET		STATEWIDE CONTRACT (MY)		
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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00001	<p>UNLESS SPECIFIED ELSEWHERE, SHIP TO: STATEWIDE</p> <p>COMMODITY CODE: 725-23-065318 BRAND NAME: MICOM MODEL NUMBER: MOTOROLA CATEGORY 100 MOBILE RADIO, HF LOW-BAND SSB ANALOG MOBILE, CHANNELS: 20 AS PER ATTACHED SPECIFICATION VENDOR SHALL MEET ALL SPECIFICATIONS AS LISTED.</p> <p>LINES 1 - 112 PRICING APCAT "DEFINED"</p> <p>APCAT MEANS, AS PER CATALOG UNIT PRICE = A SINGLE PERCENTAGE (%) PLUS (+) OR MINUS (-)</p> <p>EXPRESSED AS A: (-) FOR DISCOUNT (+) FOR A MARK UP (0) AS A NET COST</p> <p>FAILURE TO INDICATE A (-/+) WILL RESULT AS THE BID BEING CONSIDERED AS A ( + %) FOR A MARK UP. APCAT MEANS: AS PER CATALOG</p>	APCAT	N/A	-10.00
00002	<p>COMMODITY CODE: 725-23-065319 BRAND NAME: MICOM MODEL NUMBER: MOTOROLA CATEGORY 100 MOBILE RADIO, HF LOW-BAND SSB, ANALOG MOBILE, CHANNELS: 20 AS PER ATTACHED SPECIFICATION VENDOR SHALL MEET ALL SPECIFICATIONS AS LISTED.</p> <p>MANUFACTURER'S OPTIONS</p>	APCAT	N/A	-10.00
00003	<p>COMMODITY CODE: 725-23-065320 BRAND NAME: MICOM MODEL NUMBER: MOTOROLA CATEGORY 100 MOBILE RADIO, HF LOW-BAND SSB, ANALOG MOBILE, CHANNELS: 20 AS PER ATTACHED SPECIFICATION VENDOR SHALL MEET ALL SPECIFICATIONS AS LISTED.</p> <p>VENDOR SPECIAL OPTIONS -----LINES 1 - 3, GROUP AWARD-----</p>	APCAT	N/A	-10.00
00004	<p>COMMODITY CODE: 725-23-065321 BRAND NAME: CDM MODEL NUMBER: MOTOROLA CATEGORY 101 MOBILE RADIO VHF LOW-BAND, 60 WATT, 128 CHANNEL. 42 - 50 MHZ. AS PER ATTACHED SPECIFICATION</p>	APCAT	N/A	-25.00
00005	<p>COMMODITY CODE: 725-23-065322 BRAND NAME: CDM MODEL NUMBER: MOTOROLA CATEGORY 101 MOBILE RADIO VHF LOW-BAND, 60 WATT, 128 CHANNEL. 42 - 50 MHZ. AS PER ATTACHED SPECIFICATION</p> <p>MANUFACTURER'S OPTIONS</p>	APCAT	N/A	-25.00

PRICE SHEET		STATEWIDE CONTRACT (MY)		
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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00006	COMMODITY CODE: 725-23-065323 BRAND NAME: CDM ACCESSORIES MODEL NUMBER: MOTOROLA CATEGORY 101 MOBILE RADIO VHF LOW-BAND, 60 WATT, 128 CHANNEL. 42 - 50 MHZ. AS PER ATTACHED SPECIFICATION  VENDOR SPECIAL OPTIONS  -----LINES 4 - 6, GROUP AWARD-----	APCAT	N/A	-25.00
00022	COMMODITY CODE: 725-23-065339 BRAND NAME: XTL MODEL NUMBER: MOTOROLA CATEGORY 107 MOBILE RADIO VHF HIGH-BAND/UHF DIGITAL, 100 WATT, 255 CHANNEL, REAR-MOUNT. AS PER ATTACHED SPECIFICATION	APCAT	N/A	-25.00
00023	COMMODITY CODE: 725-23-065340 BRAND NAME: XTL MODEL NUMBER: MOTOROLA CATEGORY 107 MOBILE RADIO VHF HIGH-BAND/UHF DIGITAL, 100 WATT, 255 CHANNEL, REAR-MOUNT. AS PER ATTACHED SPECIFICATION  MANUFACTURER'S OPTIONS	APCAT	N/A	-25.00
00024	COMMODITY CODE: 725-23-065341 BRAND NAME: XTL MODEL NUMBER: MOTOROLA CATEGORY 107 MOBILE RADIO VHF HIGH-BAND/UHF DIGITAL, 100 WATT, 255 CHANNEL, REAR-MOUNT. AS PER ATTACHED SPECIFICATION  VENDOR SPECIAL OPTIONS  -----LINES 22 - 24, GROUP AWARD-----	APCAT	N/A	-15.00
00025	COMMODITY CODE: 725-23-065342 BRAND NAME: XTL MODEL NUMBER: MOTOROLA CATEGORY 108 MOBILE RADIO VHF HIGH-BAND/UHF DIGITAL, 110 WATT, 512 CHANNEL, W/ENCRYPTION, REAR MOUNT AS PER ATTACHED SPECIFICATION	APCAT	N/A	-25.00
00026	COMMODITY CODE: 725-23-065343 BRAND NAME: XTL MODEL NUMBER: MOTOROLA CATEGORY 108 MOBILE RADIO VHF HIGH-BAND/UHF DIGITAL, 110 WATT, 512 CHANNEL, W/ENCRYPTION, REAR MOUNT AS PER ATTACHED SPECIFICATION  MANUFACTURER'S OPTIONS	APCAT	N/A	-25.00
00027	COMMODITY CODE: 725-23-065344 BRAND NAME: XTL ACCESSORIES MODEL NUMBER: MOTOROLA CATEGORY 108 MOBILE RADIO VHF HIGH-BAND/UHF DIGITAL, 110 WATT, 512 CHANNEL, W/ENCRYPTION, REAR MOUNT AS PER ATTACHED SPECIFICATION	APCAT	N/A	-15.00

PRICE SHEET		STATEWIDE CONTRACT (MY)		
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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
	VENDOR SPECIAL OPTIONS -----LINES 25 - 27, GROUP AWARD-----			
00028	COMMODITY CODE: 725-23-065345 BRAND NAME: XTL1500 MODEL NUMBER: MOTOROLA CATEGORY 109 MOBILE RADIO 800 MHZ CONVENTIONAL ANALOG, 30 WATT, 48 CHANNEL, FRONT MOUNT. AS PER ATTACHED SPECIFICATION	APCAT	N/A	-15.00
00029	COMMODITY CODE: 725-23-065346 BRAND NAME: XTL1500 MODEL NUMBER: MOTOROLA CATEGORY 109 MOBILE RADIO 800 MHZ CONVENTIONAL ANALOG, 30 WATT, 48 CHANNEL, FRONT MOUNT. AS PER ATTACHED SPECIFICATION	APCAT	N/A	-15.00
	MANUFACTURER'S OPTIONS			
00030	COMMODITY CODE: 725-23-065347 BRAND NAME: XTL1500 ACCESSOR MODEL NUMBER: MOTOROLA CATEGORY 109 MOBILE RADIO 800 MHZ CONVENTIONAL ANALOG, 30 WATT, 48 CHANNEL, FRONT MOUNT. AS PER ATTACHED SPECIFICATION	APCAT	N/A	-15.00
	VENDOR SPECIAL OPTIONS -----LINES 28 - 30, GROUP AWARD-----			
00031	COMMODITY CODE: 725-23-065348 BRAND NAME: XTL MODEL NUMBER: MOTOROLA CATEGORY 110 MOBILE RADIO 800 MHZ TRUNKED ANALOG, 30 WATT, 16 CHANNEL, FRONT OR REAR MOUNT. AS PER ATTACHED SPECIFICATION	APCAT	N/A	-25.00
00032	COMMODITY CODE: 725-23-065349 BRAND NAME: XTL MODEL NUMBER: MOTOROLA CATEGORY 110 MOBILE RADIO 800 MHZ TRUNKED ANALOG, 30 WATT, 16 CHANNEL, FRONT OR REAR MOUNT. AS PER ATTACHED SPECIFICATION	APCAT	N/A	-25.00
	MANUFACTURER'S OPTIONS			
00033	COMMODITY CODE: 725-23-065350 BRAND NAME: XTL ACCESSORIES MODEL NUMBER: MOTOROLA CATEGORY 110 MOBILE RADIO 800 MHZ TRUNKED ANALOG, 30 WATT, 16 CHANNEL, FRONT OR REAR MOUNT. AS PER ATTACHED SPECIFICATION	APCAT	N/A	-15.00
	VENDOR SPECIAL OPTIONS -----LINES 31 - 33, GROUP AWARD-----			

PRICE SHEET		STATEWIDE CONTRACT (MY)		
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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00037	COMMODITY CODE: 725-23-065354 BRAND NAME: DVR MODEL NUMBER: MOTOROLA CATEGORY 112, VEHICLE REPEATER VHF HIGH BAND/UHF/700/800 MHZ VEHICULAR REPEATER 2/2/0.6/0.6 WATT, SINGLE CHANNEL. PER ATTACHED SPECIFICATIONS SHALL BE COMPATIBLE WITH EXISTING DEPARTMENT OF CORRECTION RADIOS.	APCAT	N/A	-15.00
00038	COMMODITY CODE: 725-23-065355 BRAND NAME: DVR MODEL NUMBER: MOTOROLA CATEGORY 112, VEHICLE REPEATER VHF HIGH BAND/UHF/700/800 MHZ VEHICULAR REPEATER 2/2/0.6/0.6 WATT, SINGLE CHANNEL. PER ATTACHED SPECIFICATIONS SHALL BE COMPATIBLE WITH EXISTING DEPARTMENT OF CORRECTION RADIOS. MANUFACTURER'S OPTIONS	APCAT	N/A	-15.00
00039	COMMODITY CODE: 725-23-065356 BRAND NAME: DVR MODEL NUMBER: MOTOROLA CATEGORY 112, VEHICLE REPEATER VHF HIGH BAND/UHF/700/800 MHZ VEHICULAR REPEATER 2/2/0.6/0.6 WATT, SINGLE CHANNEL. PER ATTACHED SPECIFICATIONS SHALL BE COMPATIBLE WITH EXISTING DEPARTMENT OF CORRECTION RADIOS. VENDOR SPECIAL OPTIONS  -----LINES 37 - 39, GROUP AWARD-----	APCAT	N/A	-15.00
00040	COMMODITY CODE: 725-23-065357 BRAND NAME: HT MODEL NUMBER: MOTOROLA (CATEGORY 200) PORTABLE RADIO, MAN DOWN VHF LOW / HIGH BAND/UHF CHANNELS: 128, ANALOG AS PER ATTACHED SPECIFICATIONS	APCAT	N/A	-28.00
00041	COMMODITY CODE: 725-23-065358 BRAND NAME: HT MODEL NUMBER: MOTOROLA (CATEGORY 200) PORTABLE RADIO, MAN DOWN VHF LOW / HIGH BAND/UHF CHANNELS: 128, ANALOG AS PER ATTACHED SPECIFICATIONS  MANUFACTURER'S OPTIONS	APCAT	N/A	-28.00
00042	COMMODITY CODE: 725-23-065359 BRAND NAME: HT ACCESSORIES MODEL NUMBER: MOTOROLA (CATEGORY 200) PORTABLE RADIO, MAN DOWN VHF LOW / HIGH BAND/UHF CHANNELS: 128, ANALOG AS PER ATTACHED SPECIFICATIONS  VENDOR SPECIAL OPTIONS  -----LINES 40 - 42, GROUP AWARD-----	APCAT	N/A	-15.00



PRICE SHEET		STATEWIDE CONTRACT (MY)		
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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00052	COMMODITY CODE: 725-23-065369 BRAND NAME: HT MODEL NUMBER: MOTOROLA CATEGORY 204 PORTABLE RADIO WITH MAN DOWN VHF HIGH BAND/UHF, 16 CHANNEL, MANUAL MAN DOWN BUTTON.  AS PER ATTACHED SPECIFICATION	APCAT	N/A	-28.00
00053	COMMODITY CODE: 725-23-065370 BRAND NAME: HT MODEL NUMBER: MOTOROLA CATEGORY 204 PORTABLE RADIO WITH MAN DOWN VHF HIGH BAND/UHF, 16 CHANNEL, MANUAL MAN DOWN BUTTON. AS PER ATTACHED SPECIFICATION  MANUFACTURER'S OPTIONS	APCAT	N/A	-28.00
00054	COMMODITY CODE: 725-23-065371 BRAND NAME: HT ACCESSORIES MODEL NUMBER: MOTOROLA CATEGORY 204 PORTABLE RADIO WITH MAN DOWN VHF HIGH BAND/UHF, 16 CHANNEL, MANUAL MAN DOWN BUTTON. AS PER ATTACHED SPECIFICATION  VENDOR SPECIAL OPTIONS  -----LINES 52 - 54, GROUP AWARD-----	APCAT	N/A	-15.00
00065	COMMODITY CODE: 725-23-065381 BRAND NAME: XTS MODEL NUMBER: MOTOROLA CATEGORY 208 PORTABLE RADIO, P25. VHF HIGH BAND/UHF, 255 CHANNEL, 5/4 W. 150-174/450 - 470 MHZ. AS PER ATTACHED SPECIFICATION	APCAT	N/A	-20.00
00066	COMMODITY CODE: 725-23-065382 BRAND NAME: XTS MODEL NUMBER: MOTOROLA CATEGORY 208 PORTABLE RADIO, P25. VHF HIGH BAND/UHF, 255 CHANNEL, 5/4 W. 150-174/450 - 470 MHZ. AS PER ATTACHED SPECIFICATION  MANUFACTURER'S OPTIONS	APCAT	N/A	-20.00
00067	COMMODITY CODE: 725-23-065383 BRAND NAME: XTS ACCESSORIES MODEL NUMBER: MOTOROLA CATEGORY 208 PORTABLE RADIO, P25. VHF HIGH BAND/UHF, 255 CHANNEL, 5/4 W. 150-174/450 - 470 MHZ. AS PER ATTACHED SPECIFICATION  VENDOR SPECIAL OPTIONS  -----LINES 65 - 67, GROUP AWARD-----	APCAT	N/A	-15.00
00068	COMMODITY CODE: 725-23-065384 BRAND NAME: XTS MODEL NUMBER: MOTOROLA CATEGORY 209 PORTABLE RADIO, ENCRYPTED VHF HIGH BAND/UHF, 512 CHANNEL, 6/5W. 136-174-380 - 470 MHZ.	APCAT	N/A	-20.00

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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00069	AS PER ATTACHED SPECIFICATION COMMODITY CODE: 725-23-065385 BRAND NAME: XTS MODEL NUMBER: MOTOROLA CATEGORY 209 PORTABLE RADIO, ENCRYPTED VHF HIGH BAND/UHF, 512 CHANNEL, 6/5W. 136-174-380 - 470 MHZ. AS PER ATTACHED SPECIFICATION  MANUFACTURER'S OPTIONS	APCAT	N/A	-20.00
00070	COMMODITY CODE: 725-23-065386 BRAND NAME: XTS ACCESSORIES MODEL NUMBER: MOTOROLA CATEGORY 209 PORTABLE RADIO, ENCRYPTED VHF HIGH BAND/UHF, 512 CHANNEL, 6/5W. 136-174-380 - 470 MHZ. AS PER ATTACHED SPECIFICATION  VENDOR SPECIAL OPTIONS  -----LINES 68 - 70, GROUP AWARD-----	APCAT	N/A	-15.00
00071	COMMODITY CODE: 725-23-065387 BRAND NAME: XTS MODEL NUMBER: MOTOROLA CATEGORY 210 PORTABLE RADIO, CONVENTIONAL ANALOG VHF HIGH BAND/UHF, 48 CHANNEL, 3/ WATT 806-870 MHZ. AS PER ATTACHED SPECIFICATION	APCAT	N/A	-20.00
00072	COMMODITY CODE: 725-23-065388 BRAND NAME: XTS MODEL NUMBER: MOTOROLA CATEGORY 210 PORTABLE RADIO, CONVENTIONAL ANALOG VHF HIGH BAND/UHF, 48 CHANNEL, 3/ WATT 806-870 MHZ. AS PER ATTACHED SPECIFICATION  MANUFACTURER'S OPTIONS	APCAT	N/A	-20.00
00073	COMMODITY CODE: 725-23-065389 BRAND NAME: XTS ACCESSORIES MODEL NUMBER: MOTOROLA CATEGORY 210 PORTABLE RADIO, CONVENTIONAL ANALOG VHF HIGH BAND/UHF, 48 CHANNEL, 3/ WATT 806-870 MHZ. AS PER ATTACHED SPECIFICATION  VENDOR SPECIAL OPTIONS  -----LINES 71 - 73, GROUP AWARD-----	APCAT	N/A	-15.00
00074	COMMODITY CODE: 725-23-065390 BRAND NAME: XTS MODEL NUMBER: MOTOROLA CATEGORY 211 PORTABLE RADIO TRUNKED RADIO CONVENTIONAL, 255 CHANNEL, 2.5/3 WATT 764/870 MHZ. AS PER ATTACHED SPECIFICATION	APCAT	N/A	-20.00

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BIDDER : MOTOROLA INC (COMMUNICATIONS GRP)		NUMBER : 4034393 SWC NUMBER : 420		PAGE 67
LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00075	COMMODITY CODE: 725-23-065391 BRAND NAME: XTS MODEL NUMBER: MOTOROLA CATEGORY 211 PORTABLE RADIO TRUNKED RADIO CONVENTIONAL, 255 CHANNEL, 2.5/3 WATT 764/870 MHZ. AS PER ATTACHED SPECIFICATION  MANUFACTURER'S OPTIONS	APCAT	N/A	-20.00
00076	COMMODITY CODE: 725-23-065392 BRAND NAME: XTS ACCESSORIES MODEL NUMBER: MOTOROLA CATEGORY 211 PORTABLE RADIO TRUNKED RADIO CONVENTIONAL, 255 CHANNEL, 2.5/3 WATT 764/870 MHZ. AS PER ATTACHED SPECIFICATION  VENDOR SPECIAL OPTIONS  -----LINES 74 - 76, GROUP AWARD-----	APCAT	N/A	-15.00
00077	COMMODITY CODE: 725-23-065393 BRAND NAME: XTS MODEL NUMBER: MOTOROLA CATEGORY 212 PORTABLE RADIO TRUNKED ANALOG/DIGITAL VHF HIGH BAND/UHF, 512 CHANNEL, 2.5/W. 700/800 MHZ AS PER ATTACHED SPECIFICATION	APCAT	N/A	-20.00
00078	COMMODITY CODE: 725-23-065394 BRAND NAME: XTS MODEL NUMBER: MOTOROLA CATEGORY 212 PORTABLE RADIO TRUNKED ANALOG/DIGITAL VHF HIGH BAND/UHF, 512 CHANNEL, 2.5/W. 700/800 MHZ AS PER ATTACHED SPECIFICATION  MANUFACTURER'S OPTIONS	APCAT	N/A	-20.00
00079	COMMODITY CODE: 725-23-065395 BRAND NAME: XTS ACCESSORIES MODEL NUMBER: MOTOROLA CATEGORY 212 PORTABLE RADIO TRUNKED ANALOG/DIGITAL VHF HIGH BAND/UHF, 512 CHANNEL, 2.5/W. 700/800 MHZ AS PER ATTACHED SPECIFICATION  VENDOR SPECIAL OPTIONS  -----LINES 77 - 79, GROUP AWARD-----	APCAT	N/A	-15.00
00080	COMMODITY CODE: 725-23-065396 BRAND NAME: MICOM MODEL NUMBER: MOTOROLA (CATEGORY 300) BASE STATION, ANALOG, HIGH FREQUENCY SSD HF 2 - 30 MHZ, CHANNELS 10  AS PER ATTACHED SPECIFICATIONS	APCAT	N/A	-10.00
00081	COMMODITY CODE: 725-23-065397 BRAND NAME: MICOM MODEL NUMBER: MOTOROLA CATEGORY 300 PORTABLE RADIO WITH MAN DOWN VHF HIGH BAND/UHF, 16 CHANNEL, MANUAL MAN DOWN BUTTON.	APCAT	N/A	-10.00

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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00082	AS PER ATTACHED SPECIFICATION MANUFACTURER'S OPTIONS COMMODITY CODE: 725-23-065398 BRAND NAME: MICOM MODEL NUMBER: MOTOROLA CATEGORY 300 PORTABLE RADIO WITH MAN DOWN VHF HIGH BAND/UHF, 16 CHANNEL, MANUAL MAN DOWN BUTTON. AS PER ATTACHED SPECIFICATION VENDOR SPECIAL OPTIONS -----LINES 80 - 82, GROUP AWARD-----	APCAT	N/A	-10.00
00086	COMMODITY CODE: 725-23-065402 BRAND NAME: QUANTAR MODEL NUMBER: MOTOROLA CATEGORY 302 REPEATER STATION, VHF/UHF P25 VHF HIGHT BRAND & UHF ANALOG SHALL BE COMPATABLE WITH EXISTING TEMA & TWRA P25 SYSTEMS. 150 - 174/450 - 470 MHZ, ONE CHANNEL AS PER ATTACHED SPECIFICATIONS	APCAT	N/A	-25.00
00087	COMMODITY CODE: 725-23-065403 BRAND NAME: QUANTAR MODEL NUMBER: MOTOROLA CATEGORY 302 REPEATER STATION, VHF/UHF P25 VHF HIGHT BRAND & UHF ANALOG SHALL BE COMPATABLE WITH EXISTING TEMA & TWRA P25 SYSTEMS. 150 - 174/450 - 470 MHZ, ONE CHANNEL AS PER ATTACHED SPECIFICATIONS MANUFACTURER'S OPTIONS	APCAT	N/A	-25.00
00088	COMMODITY CODE: 725-23-065404 BRAND NAME: QUANTAR ACCESSOR MODEL NUMBER: MOTOROLA CATEGORY 302 REPEATER STATION, VHF/UHF P25 VHF HIGHT BRAND & UHF ANALOG SHALL BE COMPATABLE WITH EXISTING TEMA & TWRA P25 SYSTEMS. 150 - 174/450 - 470 MHZ, ONE CHANNEL AS PER ATTACHED SPECIFICATIONS VENDOR SPECIAL OPTIONS -----LINES 86 - 88, GROUP AWARD-----	APCAT	N/A	-15.00
00089	COMMODITY CODE: 725-23-065405 BRAND NAME: QUANTAR MODEL NUMBER: MOTOROLA CATEGORY 303 REPEATER STATION, W/ ENCRYPTION VHF HIGHT BRAND & UHF ANALOG SHALL BE COMPATABLE WITH EXISTING TBI SYSTEM MOTOROLA SACURENET 150 - 174/450 - 470 MHZ, ONE CHANNEL AS PER ATTACHED SPECIFICATIONS	APCAT	N/A	-25.00
00090	COMMODITY CODE: 725-23-065406 BRAND NAME: QUANTAR MODEL NUMBER: MOTOROLA CATEGORY 303 REPEATER STATION, W/ ENCRYPTION VHF HIGHT BRAND & UHF ANALOG SHALL BE COMPATABLE WITH EXISTING TBI SYSTEM MOTOROLA SACURENET	APCAT	N/A	-25.00

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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00091	150 - 174/450 - 470 MHZ, ONE CHANNEL AS PER ATTACHED SPECIFICATIONS MANUFACTURER'S OPTIONS  COMMODITY CODE: 725-23-065407 BRAND NAME: QUANTAR ACCESSOR MODEL NUMBER: MOTOROLA CATEGORY 303 REPEATER STATION, W/ ENCRYPTION VHF HIGHT BRAND & UHF ANALOG SHALL BE COMPATABLE WITH EXISTING TBI SYSTEM MOTOROLA SACURENET 150 - 174/450 - 470 MHZ, ONE CHANNEL AS PER ATTACHED SPECIFICATIONS VENDOR SPECIAL OPTIONS -----LINES 89 - 91, GROUP AWARD-----	APCAT	N/A	-15.00
00092	COMMODITY CODE: 725-23-065408 BRAND NAME: MTR2000 MODEL NUMBER: MOTOROLA CATEGORY 304 REPEATER STATION, VHF HIGH-BRAND, UHF & 800MHZ ANALOG, ONE CHANNEL, 150 - 174/450 - 470/806 - 870 MHZ AS PER ATTACHED SPECIFICATIONS	APCAT	N/A	-25.00
00093	COMMODITY CODE: 725-23-065409 BRAND NAME: MTR2000 MODEL NUMBER: MOTOROLA CATEGORY 304 REPEATER STATION, VHF HIGH-BRAND, UHF & 800MHZ ANALOG, ONE CHANNEL, 150 - 174/450 - 470/806 - 870 MHZ AS PER ATTACHED SPECIFICATIONS  MANUFACTURER'S OPTIONS	APCAT	N/A	-25.00
00094	COMMODITY CODE: 725-23-065410 BRAND NAME: MTR2000 ACCESSOR MODEL NUMBER: MOTOROLA CATEGORY 304 REPEATER STATION, VHF HIGH-BRAND, UHF & 800MHZ ANALOG, ONE CHANNEL, 150 - 174/450 - 470/806 - 870 MHZ AS PER ATTACHED SPECIFICATIONS  VENDOR SPECIAL OPTIONS -----LINES 92 - 94, GROUP AWARD-----	APCAT	N/A	-15.00
00095	COMMODITY CODE: 725-77-065411 BRAND NAME: STR3000 MODEL NUMBER: MOTOROLA CATEGORY 305 DIGITAL REPEATER STATION, 700MHZ VOICE AND DATA CHANNELS: 1 DIGITAL P25  AS PER ATTACHED SPECIFICATIONS	APCAT	N/A	-15.00
00096	COMMODITY CODE: 725-77-065412 BRAND NAME: STR3000 MODEL NUMBER: MOTOROLA CATEGORY 305 DIGITAL REPEATER STATION, 700MHZ VOICE AND DATA CHANNELS: 1 DIGITAL P25  AS PER ATTACHED SPECIFICATIONS MANUFACTURER'S OPTIONS	APCAT	N/A	-15.00

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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00097	COMMODITY CODE: 725-77-065413 BRAND NAME: STR3000 ACCESSOR MODEL NUMBER: MOTOROLA CATEGORY 305 DIGITAL REPEATER STATION, 700MHZ VOICE AND DATA CHANNELS: 1 DIGITAL P25  AS PER ATTACHED SPECIFICATIONS VENDOR SPECIAL OPTIONS -----LINES 95 - 97, GROUP AWARD-----	APCAT	N/A	-15.00
00098	COMMODITY CODE: 725-77-065414 BRAND NAME: QUANTAR MODEL NUMBER: MOTOROLA CATEGORY 306 TRUNKED REPEATER STATION, 800MHZ ANALOG/DIGITAL, SHALL BE COMPATABLE WITH EXISTING TN DEPT. OF CORRECTIONS, TEMA AND DEPT. OF SAFETY. 806-869MHZ, ONE CHANNEL AS PER ATTACHED SPECIFICATIONS	APCAT	N/A	-20.00
00099	COMMODITY CODE: 725-77-065415 BRAND NAME: QUANTAR MODEL NUMBER: MOTOROLA CATEGORY 306 TRUNKED REPEATER STATION, 800MHZ ANALOG/DIGITAL, SHALL BE COMPATABLE WITH EXISTING TN DEPT. OF CORRECTIONS, TEMA AND DEPT. OF SAFETY. 806-869MHZ, ONE CHANNEL AS PER ATTACHED SPECIFICATIONS MANUFACTURER'S OPTIONS	APCAT	N/A	-20.00
00100	COMMODITY CODE: 725-77-065416 BRAND NAME: QUANTAR ACCESSOR MODEL NUMBER: MOTOROLA CATEGORY 306 TRUNKED REPEATER STATION, 800MHZ ANALOG/DIGITAL, SHALL BE COMPATABLE WITH EXISTING TN DEPT. OF CORRECTIONS, TEMA AND DEPT. OF SAFETY. 806-869MHZ, ONE CHANNEL AS PER ATTACHED SPECIFICATIONS VENDOR SPECIAL OPTIONS  -----LINES 99 - 100 -----GROUPED	APCAT	N/A	-15.00
00101	COMMODITY CODE: 725-77-065417 BRAND NAME: QUANTAR MODEL NUMBER: MOTOROLA CATEGORY 307 DATA BASE STATION, ANALOG, 800MHZ RD-LAP 19.2 DATA BASE STATION COMPATABLE WITH EXISTING DEPARTMENT OF SAFETY DATA NETWORK. AS PER ATTACHED SPECIFICATIONS	APCAT	N/A	-15.00
00102	COMMODITY CODE: 725-77-065419 BRAND NAME: QUANTAR MODEL NUMBER: MOTOROLA CATEGORY 307 DATA BASE STATION, ANALOG, 800MHZ RD-LAP 19.2 DATA BASE STATION COMPATABLE WITH EXISTING DEPARTMENT OF SAFETY DATA NETWORK. AS PER ATTACHED SPECIFICATIONS	APCAT	N/A	-15.00

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00103	MANUFACTURER'S OPTIONS COMMODITY CODE: 725-77-065420 BRAND NAME: QUANTAR ACCESSOR MODEL NUMBER: MOTOROLA CATEGORY 307 DATA BASE STATION, ANALOG, 800MHZ RD-LAP 19.2 DATA BASE STATION COMPATABLE WITH EXISTING DEPARTMENT OF SAFETY DATA NETWORK. AS PER ATTACHED SPECIFICATIONS  VENDOR SPECIAL OPTIONS -----LINES 101 - 103, GROUP AWARD-----	APCAT	N/A	-15.00